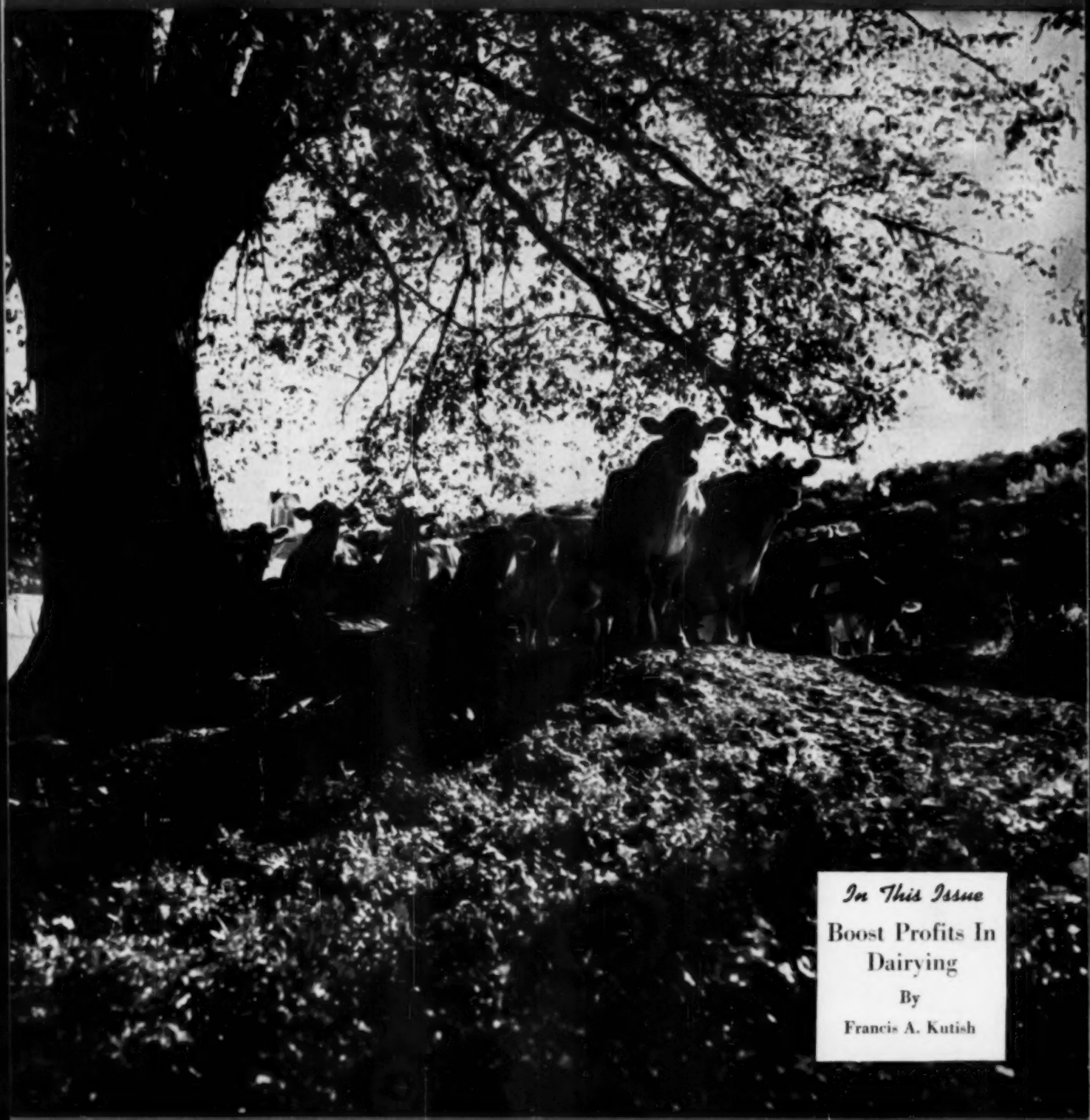
HOARD'S DAIRYMAN

THE NATIONAL DAIRY FARM MAGAZINE



In This Issue

Boost Profits In Dairying

By

Francis A. Kutish

Our 65th year of service to American agriculture

Volume 95, No. 18 Fort Atkinson, Wisconsin September 25, 1950

Lick the "BIG 4" and you'll boost dairy profits

MAKING more money from your dairy herd depends upon completely answering the "Big 4" problems as explained below.

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Opinions, Brickbats, Bouquets

Why Not Consider Weight?

HOARD'S DAIRYMAN: — With the steadily increasing interest in artificial breeding associations and the quest and search for better proven bulls, I have often wondered why the tester, when entering a heifer's sheet in the DHIA herd book, doesn't also place her taped weight with the other information given when he sends her lactation report form to the Bureau of Dairy Industry. Then, when the sire's average is computed, the difference in weights would also be shown. This would give a world of environmental information.

Have enclosed work sheet, setting the dams at the breed-average production. With the sire's proving on the first five pairs, the proof shows him to be quite a worthy individual. He would, I believe, be in the upper 25 per cent of proven sires without weight factors considered. When the difference in weight factors is also shown, I am of the opinion that the heifers were better grown and had a better chance than the dams.

Also, with the weights recorded the herd owner would become conscious of his calf raising methods. It wouldn't take many years until a graph form would show the years of lots of feed and adverse years, just by the weight factor of the heifers as they entered the milking string.

In a specific herd a simple graph made of a cow's production and studied at the end of the year would reveal the months when the feeding of some extra hay, as pastures dry up, etc., would have held production at a more uniform level. The average herd owner could get some very worth-while information which would put added income in the bank.

I have been reading Hoard's Dairyman since my high school days in the '20s, all the pros and cons of proving sires and sire selection. Yet, in all the years, I have never seen any mention of the weight factors and have often wondered why.

Kansas. CLARE SOWERS.

More on Milk Strikes

HOARD'S DAIRYMAN:—Referring to your editorial on page 498 of July 10, 1950, regarding the Pittsburgh milk strike.

Over the years, I have subscribed to about every farm paper of any consequence in the United States. I have come to the conclusion that the main purpose of these papers is to mislead and confuse the farmer so he will continue to be the most exploited man in our economic system and will continue to buy grossly overrated farm machinery at greatly inflated prices.

As usual, your discussion of the causes of this milk strike is very fragmentary. Your main purpose is to chastise labor unions and build a wall of hatred between farmers and other working people, to divide and then conquer. Of course, farmers lost the income from milk during the strike and the strikers lost their wages — and they both continually lose through many other causes

which you would not dream of mentioning.

I never was a member of any labor union, and realize they make mistakes the same as we all do, but they have made great advances and I admire the intelligence and courage they show. I challenge you to name one single industry (except farmers) that uses any different tactics than labor unions. They are all working for their own interests.

Regardless of the efforts of farm papers to confuse the issue, this fact stands out clearly that Henry Wallace's period as Secretary of Agriculture and his policies have done more for the farmer and agriculture —better farming and more intelligent direction — than was ever done in all our previous farm history. The farmer has his course charted if he chooses to follow it, and for all this, in my honest opinion, we owe farm publications nothing as they have fought tooth and nail against every advance made.

Pennsylvania. A. M. SCHROYER.

Does Not Want Charity

HOARD'S DAIRYMAN:—Your records will show that I have been a subscriber to your fine magazine for some time. Accordingly, I am taking the liberty of sending you a copy of an article that appeared in the Detroit News under date of June 25, 1950, and which contains information that every farmer in the country should know.

I am certainly in favor of keeping the farmer prosperous, but I cannot see the logic of raising 50,000,000 bushels of potatoes just to be destroyed while Canada ships in about 5,000,000 bushels to take advantage of our screwy plan. Millions of pounds of other produce are spoiling while the government keeps on piling up larger surpluses.

It seems to the writer that the only man to lick this problem is the farmer himself. He must realize that the whole scheme was designed to buy the farmer's vote. The farmer does not want charity and certainly does not want to raise things on his land just to see them destroyed. It is not our way of free enterprise.

Michigan. RALPH J. DALY.

More Butter to Farmers

HOARD'S DAIRYMAN:—I was interested in the letter of C. R. Gerry in the July 25 issue. I would like to say first make everyone who milks a cow a butter user. I travel around a lot among farmers and it is surprising how many farmers sell their cream and eat oleo. This could be prevented a lot by having every cream or milk buying station keep butter and insist that farmers accept butter in exchange for butterfat as part payment of their weekly check. As it is in a lot of cases, farmers sell their cream at a buying station and then have to pay a couple additional cents for butter at their local grocery.

Let's keep up the good work of advertising dairy products. If we don't, I'm sure no one else will.

Iowa. WILLARD LONG.

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HOARD'S DAIRYMAN

The National Dairy Farm Magazine

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In This Issue

Vol. 95, No. 18
Sept. 25, 1950

TITLE PAGE

Boost Profits in Dairying . . . . . *F. A. Kutish* 649

FEATURES

Each Cow an Individual . . . . . *J. D. Naugle* 650
Safety First for Cattle, Too . . . . . *P. L. Kelly* 651

SHORT FEATURES

Clover-Sorghum and Three-Way Profits . . . . . *A. J. Bryan* 656
Identical Twins . . . . . *G. Nichols* 657
Shavings for Bedding 659
Milk for Veal Calves 659
Mixes Are Magic . . . . . *M. Pike* 662
Treat Your Calves Like Babies 664
Foot and Mouth Disease in Venezuela 670
Ruptured Pigs 671

REGULAR FEATURES

Opinions and Brickbats 646
Farm Flashes 652
Dairy Digest 653
Editorials 658
Poultry 660
Dairy Farm Home 662
Junior Dairymen 664
Veterinary 671

COVER PICTURE

Staff photographer Jim Baird has the reputation of sounding more like a bull than a real bull sounds—at least with farmers who have watched him take pictures. But his throaty rumblings attracted these Jerseys to the neck-stretching point, and resulted in this unusual combination of cows and shadows from a late afternoon sun. The cows represent only a small part of the herd of 72 registered Jerseys on the 240-acre farm of Harry R. Giese and his son, Kenyon, in Sauk County in Southwestern Wisconsin. Ken, who is outstanding both as a 4-H club and FFA member, helped his father build up the fine herd, plus a flock of 1,500 White Leghorn hens. The present 3-year-old herd sire, Sybil Owl Duncan, and four heifers were purchased from the famous Brigham herd of Vermont. Other than that, most of the animals on the farm have been bred and raised at home.

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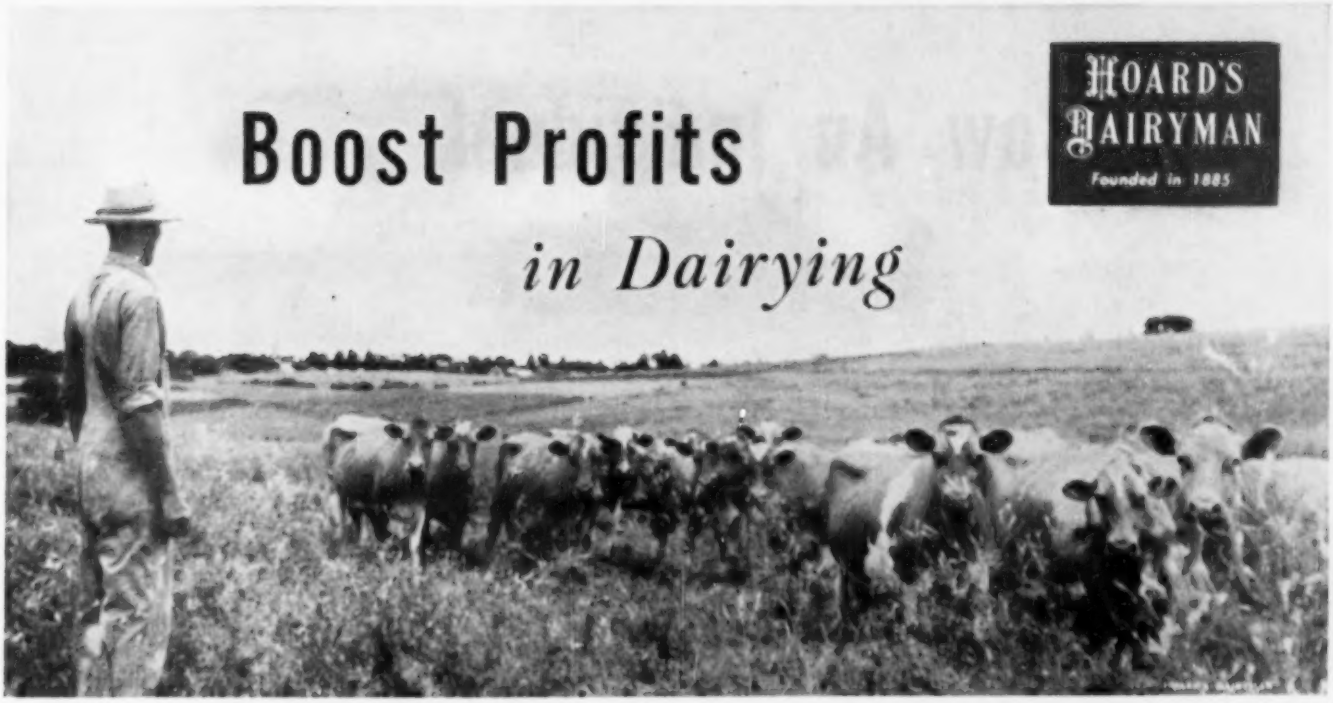


Boost Profits *in Dairying*

HOARD'S DAIRYMAN
Founded in 1885

Proper balance . . . Best management practices
High output per man . . . Hold costs down

by Francis A. Kutish

SOME dairymen make money on their cows every year—even when milk and butterfat prices are low. Other dairymen seldom make ends meet, except under most favorable circumstances.

What lies behind this difference?

Experience of successful dairy farmers indicates there are four steps to dairy profits: 1. Proper balance among the enterprises. 2. Good management and feeding practices. 3. High output per man. 4. Ability to hold down costs.

Farm management records kept by farmers in cooperation with Iowa State College over several years show dairying's advantage lies in the ability to use a large amount of family labor, roughage, and pasture which might have few alternative uses. At the same time, these records show that hogs make consistently more money per hour of labor than either dairy cows or poultry. Hogs require a small number of hours of labor but a large amount of corn. Dairy cows, on the other hand, take more labor as compared with the amount of feed. Feed makes up from 80 to 85 per cent of the total cost of producing hogs, but accounts for only 50 to 60 per cent of the total cost of producing milk.

Thus, under midwest conditions, dairy-hog farming works out well in making full use of farm raised feeds and available labor.

Be Liberal With Roughage

At present costs it does not pay to go very far in substituting grain for roughage in feeding dairy cattle. A given amount of nutrients in the form of concentrates usually costs more than a like amount when supplied as roughage. While grain and other concentrates in the ration usually add to the milk production, grains usually cost more per unit of feed than do roughages. That means that adding more concentrate does not always increase net returns over feed costs.

In fact, some dairymen might cut the amount of grain fed their milk cows and feed more roughage. There is a wide range of choice open to dairymen in the combination of grains and roughages in the dairy ration. The exact combinations, of course, depend upon the price of grain, the price of hay, and other uses of grain open to the farmer in his business.

One Chickasaw County, Iowa, dairy farmer deliberately cut the rate of feeding his herd of high producing cows from 18 to 12 pounds of grain daily. His herd slipped from an average butterfat output of about 500 pounds per cow to 390 pounds.

But his farm accounts proved that it paid off in dollars and cents, since his total farm profit went up. He was a good hog man and the grain he took away from his cows went to raising more hogs. His cows ate more hay—and the hay was a surplus item on his farm. He had less disease trouble after he quit pushing his cows so hard. And he didn't need to pay as close attention to his herd—releasing more time for other parts of his farm business. (Before, he always fed the cows himself; he was afraid the hired man would get the cows "off feed.")

Feed a Balanced Ration

Studies at the University of Wisconsin bear out this experience. Herds consuming large quantities of feed, consisting of good quality roughage, produce butterfat more efficiently than those fed smaller quantities of roughage but more grains and other concentrate feeds.

The second point to consider is good management and feeding practices. Studies at the University of Wisconsin show about 40 per cent of the variation in the production between cows results from heredity and such factors as climate, age of cow, and housing conditions. All of these are more or less constant year after year. The kind and amount of feed along with the method of feeding and such management factors as length of previous lactation, length of dry period, season of freshening, and times milked per day, account for the remaining 60 per cent of the variations in production.

Improper feeding is one of the reasons why some farmers don't do better with their dairy cows. Farmers with high profit herds feed better balanced rations and make sure their cows get enough protein.

But not all heavily fed herds produce proportionately high amounts of milk. There is a point beyond which it does not pay the dairyman to increase the amount of feed fed—depending upon the productivity of the cows, the amount of disease, the management of the herd, and other factors. Northeast Iowa dairy farmers who fed the most grain got lower returns from each $100 feed fed to their cows than their neighbors who followed medium levels of feeding, according to a recent study.

A good culling program must go hand in hand with good feeding to help eliminate those animals which do not show satisfactory response to feed and care.

Fall Freshening Profitable

Time of freshening also is important. Milk production is stimulated in two periods: First at the time of freshening and second, when they're first turned out on green pasture. These two periods should occur at different stages of a cow's lactation for highest milk production. For this reason high producing cows will usually produce more if they freshen in the fall rather than in some other time of year.

The University of Wisconsin has found that herds which are fed heavily and freshen in the fall produce nearly 50 lbs. more fat per cow than those that have less than 10 per cent of the cows freshened at that time. Returns over feed costs also are as much as 15 per cent greater.

On the other hand, a high percentage of fall freshening did not result in greater milk or fat production for those cows producing relatively small amounts. In fact it made little difference with the production of these cows whether they freshened in the spring or the fall.

A dairy farmer can't ignore the cost side of the ledger, either. Feed and labor make up 70 to 80 per cent of the total cost of producing milk. So any steps that will cut the amount of either feed or labor is good help for the dairyman.

We have pointed out that tests and actual experiences show dairymen can lower feed costs through better use of roughage which permits using less grain. Better methods of drying the hay crop or making silage of it will help to preserve nutrients and stretch the feed supply and lower feed costs.

Saving Labor Increases Profits

But the biggest saving can be made in labor. From six to eight times as much is needed to tend cows that eat a given quantity of feed as steers or growing hogs. Dairy cows usually are fed individually; beef cattle and hogs are self-fed.

Dr. C. Y. Cannon of Iowa State College has found that the heaviest labor requirement of dairying is in milking. And this differs little from one time of the year to another. The second largest labor need comes in care of milk. Many times this can be reduced by rearrangements which will cut the effort needed to handle the fresh milk. Handy washing tubs, a quick source of hot water, and use of wetting agents will lessen labor and time needed to wash separators, milking machines, and other dairying utensils.

One of the greatest opportunities for saving labor lies in feeding the cows and cleaning the barn. That's why many dairymen favor the pen-type barn where the cows run loose on the ground floor and the stanchions are used only in the comparatively small milking parlor. But there are plenty of opportunities for saving labor in the stanchion-type barn, too.

The department of agricultural economics at Michigan State College has found that the average Michigan dairy farmer feeds a ton or more of grain to each cow yearly. *(Turn to page 661)*

Each Cow An Individual

by John D. Naugle

A combination of cow-families, good management, and the love for cattle has made this dairy farm one of the most successful in Pennsylvania.

Part of the Gruber Guernsey herd with the farm buildings in the background.

IN the beautiful foothills of the Appalachian mountain range in the western part of Pennsylvania is Paul Gruber's farm; one of the most outstanding Golden Guernsey milk production centers of the East. One can well vision comfort and peacefulness while watching his herd of Guernseys; some grazing, some lying in lush green pastures backed by the lay-out of serene looking farm buildings.

To relate this true-to-life story in story book fashion, it all began many years ago when Grandpa Paul Black purchased the present site from some relatives and kept what we today term "scrub cows." As all good stories relate, there was a fair daughter of marriageable age in this family who was married to John W. M. Gruber; and thusly the farm was taken over by the second generation, Paul Gruber's parents. Son Paul took great interest in (the then) grade cows and through his continued efforts converted their place into a purebred Guernsey farm. This is where the theme of the story, "Each Cow an Individual," begins.

In 1922 Paul enrolled in the two-year dairy production course at Pennsylvania State College and upon completion of these studies, went into partnership with his father until the latter's death in 1943, at which time he became the sole proprietor of the farm. During this time they had 100 acres in the original farm, 90 acres in partnership, and leased 90 acres. Paul has retained this same acreage as of today.

All the milk was sold wholesale until they began a retail route in 1933. Today the daily delivery is approximately 450 quarts of whole milk along with cream and chocolate milk.

Over One-half Herd From One Cow

The conversion from grades to purebreds began when the father and son purchased six registered cows. One of these cows, "Dolly's Peachbud of Sunset View," was the foundation animal whose descendants make up over half the herd today. Although her reproduction was more important than her production in the Gruber herd, she produced 99,854 lbs. milk with 5,216 lbs. fat in her lifetime. While in the Gruber herd she added five daughters to the milking list.

The production of these three sisters are: White Lights Sunny Peach (lifetime production) 93,912 M, 5,042 F; White Lights Dolly (lifetime production) 119,697 M, 5,511 F; White Lights Peach Bud is still in the herd and is credited with 95,226 M, 4,669 F. With her present rate of production, Paul remarked that she will pass the 5,000-lb. (fat) mark in this lactation.

The two remaining daughters of the original five left the herd at a young age. One died of poisoning just before finishing the total production of 3,000 lbs. fat. The other gave birth to four consecutive sets of twins. All were born dead and the cow removed from the herd.

Speaking of production records, Paul says, "Each cow is an individual". Instead of boasting about a high yearly record, Paul emphasizes total lifetime production. He takes great pride in speaking about the three cows that surpassed the 5,000-lb. fat total; three others that have 4,000 lbs. fat to their credit; and 15 more that have gone over the 3,000 lbs. total. Many of these cows are still producing in the herd and the majority of them are descendants from the Peach cow family mentioned above.

In the winter Paul feeds about 125 head of cattle of which 56 are in the milking herd. Each year he makes replacements for non-breeders, disease, and bad udders. Due to the demand of the retail milk route, Paul cannot cull the herd as closely as he would like. Last year he sold 10 cows for breeding stock and 12 heifers for 4-H club work. In 1949 a group of Western Pennsylvania Guernsey breeders sold a trailer truck load of young calves to Kentucky for 4-H club work, 7 of them from the Gruber herd.

One lb. Grain—3 lbs. Milk

When questioned about his feeding methods, Paul said, "In this herd each cow is treated individually." On the average, though, he feeds 1 lb. grain for each 3 lbs. milk produced. The ration for the milking herd is made up of home grown oats, corn, and wheat, mixed with a 32% supplement to make a 16% protein feed. The dry cows and calves receive a commercial fitting ration.

When it comes to pasture and roughages, Paul is a firm believer in grassland farming. Early in the spring 9 acres of orchard grass and ladino clover mixture is cut and used as grass silage. The remainder of the summer this field is used for rotational grazing. There are also six acres of ladino clover and timothy cut for first crop hay, and pastured in rotation until fall. These two areas were seeded 9 and 10 years ago, respectively. The reason for the long life of these pastures is the periodic application of fertilizer, superphosphate and manure. A ladino-alfalfa and timothy seeding from the previous year's grain crops is used for hay and then pastured the rest of the season. In exceptionally good growing weather, when this second crop is not needed for pasture, it is harvested for hay. All the silage is made with the forage harvester. The hay is made in the same manner and cured on a mow drier.

Much credit for Mr. Gruber being a successful dairyman is his eagerness to adopt new methods and management practices. He has been a great leader in the Clarion County Extension Service, in the DHIA program, and in the artificial breeding program. He is a charter member of the first Clarion County Bull Association and of the Western Pennsylvania Artificial Breeding Co-Operative of which he has served as vice-president since its beginning in 1945. When one writes of the Gruber Farm, one unconsciously writes of the accomplishments and activities of Paul Gruber, particularly in the agricultural field.

And to write of Paul Gruber one cannot overlook Cornelia Whitehill Gruber and the work she is doing in extension, nor their joint interests in church, community, and grange. The Grubers have three children: John Paul, Jr., Joan, and Douglas. John Paul, Jr., is 18 years of age and is a student at Pennsylvania State College. During his six years in 4-H club work, he raised a heifer as one of his projects. This cow and her daughters are now quite prominent in the Gruber herd. Joan, 16, has had two years in 4-H club work, also taking a heifer calf as a project. Douglas, 10, is eagerly looking forward to his following suit in 4-H work.

With the unfolding of this narrative of peaceful Western Pennsylvania, one can see the benefits derived from Paul Gruber's "Each Cow An Individual."

THE END

The author is assistant manager of the Western Pennsylvania Artificial Breeding Cooperative.

The Grubers enjoying a Sunday afternoon reading. Left to right: John Paul, Jr., Joan, Douglas, Mrs. Gruber, Mr. Gruber.

Safety First for Cattle, Too

by Philip L. Kelly

Through attention to small, simple details herd losses caused by accidents and disease can be kept low.

WE HAVE spread slogans of "Safety First" to the highway, the factory, and the home and they have saved many human lives. The same slogan if applied to dairy cows would be worthwhile.

When cattle are lost through accidents or calf losses are excessive, the job of maintaining or improving a herd becomes very difficult. Without the necessary replacements the cows which should normally be culled for low production or poor type are retained. In some instances it is even necessary to purchase additional cattle.

One 30-cow herd was having very severe losses several years ago. Two-thirds of the cows were sold annually with only twelve or thirteen heifers being raised for replacements. The herd owner realized that conditions and managment had to be changed so that the cows could live longer. Three years later with a somewhat remodeled barn and better management, approximately one-sixth were being sold annually because of physical defects, such as mastitis and breeding trouble. The herd was showing more profit and was improving rapidly. He could hope for still better results. Several exceptionally well managed herds in that area had reduced their numbers of cows culled to less than ten per cent. What he had done or hoped to do can be summarized in the table below.

When he started, cows actually had to be purchased to maintain his cow numbers. The sound cows in the herd had to be kept to hold up production without much consideration of either their producing ability or type. At the end of the three-year period he was not only in a position to sell up to eight cows for dairy purposes but also was able to cull almost one-fourth of his lowest producing or poorest type cows annually if he wished. If good heifers are coming on, a herd improves very rapidly with this much selection.

Three Things to Do

The steps to take in improving barn and herd management for cow survival can be grouped into three classes. The first is to check the methods of handling and housing the cows. The second is to plan a breeding program which produces the type of cows which live a long time. The third is to go over, step by step, the practices used in calf and heifer raising.

The method of handling the cows is the one in which changes will cause the greatest immediate improvement. The first thing to do is to look over the places the cows are kept for possible hazards. Mud puddles in lanes and yards should be fenced off or drained. The fence lines should be inspected for broken pieces of old wire. All trash in the yards and pastures should be removed as it is always a hazard which will occasionally injure udders. Ledges, props, or slippery places which might cause accidents should be eliminated. Keeping the yards and pastures free from this type of hazard is not difficult and certainly not expensive, yet a lack of these simple precautions cause a loss of many good cows annually.

Keep Hardware Away From Cows

On one farm two old wooden stave silos in the cow yard had to be taken down. They were pulled over and the debris was cleared up as rapidly as possible. However, the herd was not kept out of the yard while the boards and hoops were being removed. Months later three of the best cows died from hardware. Cows apparently like to eat pieces of metal. I suppose the best ones have the best appetites. When buildings are being remodeled, the cows should be kept away until the job is done and all waste metal and nails can be cleaned up. Metal tags which come on feed bags and nails which work up in the floors where feed is mixed are other possible sources of trouble. Iron filings which come from pipe cutters or pipe threading machines should never be allowed to get in feed alleys or mangers when drinking cups are being installed.

One very unusual accident which normally could not have been avoided was the cutting of a cow's tongue by a sharp object which apparently was picked up in the hay field by a baler. This got in the manger. The cut was deep and apparently very sore. While the cow recovered, she lost flesh to the point where her production suffered seriously.

Drafts Increase Mastitis

When the barns are inspected for hazards, one of the most important things to check for is possible drafts. One herd owner wonders why he has trouble with mastitis when there are large holes in the wall of his barn at the end of his line of stanchions. Another herd owner whose barn has a single wall of boards one inch thick has had mastitis for the five or six years I have known him. In another much better barn, a two-year-old heifer forced to stand in a stanchion with bad cross drafts twenty-four hours a day was having a severe attack of mastitis. I marvelled that she had not become sick sooner since she had stood in that stall for two months since she had freshened.

In another herd where mastitis was a problem, a loafing shed was used. The shed area was too small. The floors were wet and the cows were not sufficiently protected. If the herd owner cannot stay for long periods in the same places where he keeps his cows without getting sick, he has no reason to expect good cows to stay there without getting mastitis. Conditions of this kind should be checked very *(Turn to page 654)*

Relation of the Number of Cows Sold for Physical Defects to the Numbers Sold for Dairy Purposes in a Thirty Cow Herd

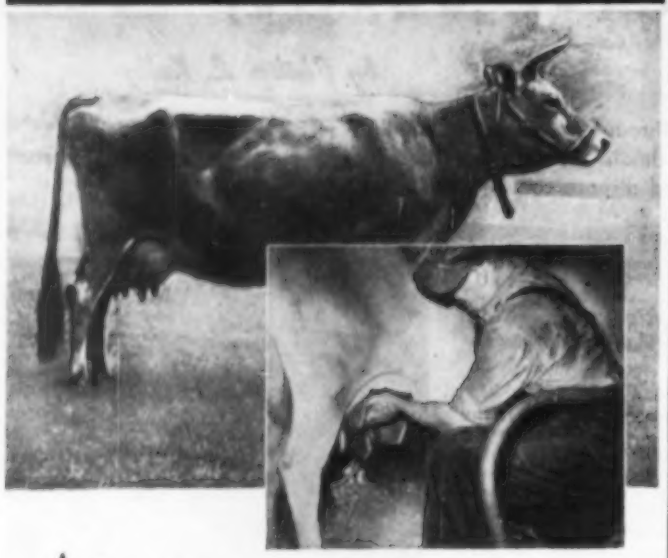
Cows sold for physical defects		Ave. No. of heifers for replacements	Cows sold for dairy purposes	Cows needed by purchase	Remarks
No.	%		No.	No.	
20	66	13	—	7	This is what one owner actually had.
10	33	13	3	—	This would have been much better.
5	16	13	8	—	He reduced his losses to this during the third year.
3	10	13	10	—	If he could get his losses to this, he would be an outstanding manager.

Calf losses are serious on many dairy farms. One of the most common causes of trouble is cold, wet, drafty pens.

The routine use of a strip cup is one of the finest safeguards in the control of mastitis. Cases are found early.

Wet, muddy barnyards are source of foot rot, a serious problem in a dairy herd. Prevention is easier than treatment.

ARE YOUR COWS WORTH A PENNY APIECE TO YOU?



ACTUALLY it costs even less to give each cow in your herd the daily protection of Nibroc KOWTOWLS, the new, single service paper towels made especially for dairy use.

Think of it! For less than a penny per cow per day, you can help prevent mastitis from striking your herd and lowering your milk profits. You can't possibly spread infection from one animal to another on a Nibroc KOWTOWL because you throw the towel away ... and with it any lurking infection.

GET RID OF A THREAT AND A CHORE, TOO

Besides being safer, Nibroc KOWTOWLS also relieve you of the daily chore of washing, boiling, sterilizing old-fashioned cloths and rags. Yet you use Nibroc KOWTOWLS exactly as you would a cloth. Twist them, pull them, saturate them in solution—they never come apart when wet. They hold heat, too, to stimulate "let-down" for the fast milking routine.

WHY WORK HARDER THAN YOU HAVE TO?

Nibroc KOWTOWLS make your job easier ... save time, trouble, labor. They help prevent mastitis, cut costs, produce cleaner, better milk ... milk that commands top prices. Any wonder that throughout Dairyland these ingenious paper towels are catching on fast ... rapidly replacing old-fashioned methods of preparation. Like to prove to yourself that Nibroc KOWTOWLS can simplify *your* dairy routine? Mail the coupon today.

NIBROC KOWTOWLS are a product of BROWN COMPANY producers of Nibroc Towels for industrial use. Mills—Berlin, N. H.

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Nibroc KOWTOWLS

MAINTAIN FALL MILK PRODUCTION

It is not uncommon to find many dairy herds producing fifty per cent more milk during May than during November and the other fall months.

"I might produce milk if I had good pasture."

Purdue dairymen say that the wide differences in seasonal production are usually the result of mismanagement. One of the successful steps in overcoming seasonal declines in milk production is to provide late fall grazing. An acre of fall rye per cow has no equal in this respect.

Cows freshening during the fall months secure several weeks of excellent grazing from rye. Temperatures are lower and flies are less troublesome than during summer months.

G. A. Williams offers the following suggested herd management practices for fall dairying:

1. Sow one acre of fall rye (Balbo preferred) per cow. An application of 100 to 200 pounds of a commercial fertilizer is often advisable.
2. Give cows a dry period of six to eight weeks.
3. If pastures are retarded by lack of rain, feed either hay, silage, or both daily.
4. Feed cows according to individual milk production, one pound of grain for each 3 pounds of milk produced is a satisfactory rate.
5. Observe correct milking methods.
6. Provide shelter at night when the weather becomes cold and stormy.

COST OF KEEPING BULLS

In a study made by the Pennsylvania Experiment Station, it was found that the cost of keeping a bull varies widely, depending on feeding, breeding, and management practices of the dairyman.

The annual net cost of keeping a bull ranges from $182 for purebred bulls kept in a special corral to $125 for grade bulls that were permitted to run with the cows. On individual farms the range in cost was considerably greater. In general, feed accounted for slightly more than one-half of the total cost, and labor was next in importance, representing almost 30 per cent of the total.

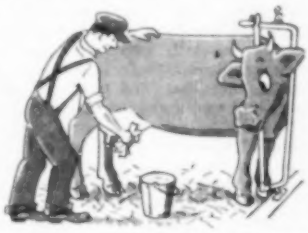
Compared with cost of services of artificial breeding associations, which was $5.20 per cow, the cost of keeping a bull was found to be considerably more. The average cost (per cow) of keeping a bull was $9.59 for purebred herds and $9.86 for grade herds. The higher costs for grade herds were due to their smaller size.

Dairymen following the practice of keeping a bull for most of the herd while using artificial breeding on the remainder had the highest total breeding costs, averaging $12.46 per cow.

TWO REASONS FOR WASHING

A good herdsman knows that the time and method of washing a cow's udder is very important. It is obvious that proper washing means cleaner milk. Less appreciated is the fact that washing sets off a chain reaction in the cow that results in her letting down her milk.

About one minute before the milking machine is placed on the cow, or the cow is to be hand milked, the udder and teats should be very thoroughly wiped and massaged about 30 seconds. Use a disposable paper towel, or a cloth, wrung out of very warm water (130° F.). This water should contain a suitable



compound to kill bacteria. The new quarternary ammonium compounds and the chlorine compounds and solutions give good results when used according to directions on the containers. These products are sold under various trade names.

This problem of washing udders is often very poorly done on some dairy farms. The ideal procedure is to follow the method mentioned above and use disposable paper towels made especially for this purpose. The alternative, of course, is to have a separate wash cloth for every cow in the string. Carry all these wash cloths in one bucket of chlorine or quaternary ammonium compound solutions. In the latter case, after each cloth is used, it should be placed in a good dairy washing powder solution. They must be washed in the solution in which they have been soaking. They then must be rinsed in fresh, clean water and stored again until the next milking in a pail containing a sterilizing solution.

This latter procedure of handling wash cloths has kept many farmers from following the method. More common is the practice of using one cloth and attempting to wash the udders of the entire herd with this one piece of fabric. Anyone who has tried to keep such a cloth reasonably clean after washing 10 or 15 cows, knows that this is almost impossible.

The important thing to remember is that the paper towel or cloth and the solution used to wash the udders should be clean for each animal.

Dairy Digest

RUTGERS FARM SHORT COURSES

Rutgers University, New Brunswick, N. J., will begin its annual series of 10-week courses in agriculture for the 45th time October 16.

According to an announcement by Prof. Frank G. Helyar, director of resident instruction at the College of Agriculture, seven courses will be given this year. They are dairy farming, fruit growing, vegetable production, animal husbandry, poultry husbandry, turf management, and landscape maintenance.

OLEO IN CALIFORNIA

California's state attorney general, in response to a request for clarification of the California law regarding use and serving of oleomargarine, in August handed down an opinion that colored oleomargarine may not be served in any restaurant, hotel, boarding house, hospital, private school, or other similar places. He ruled, however, that colored oleomargarine may be used in public schools and state, county, and city institutions other than charitable or penal institutions which receive state assistance.

Use is also banned in connection with meals served in compensation directly or indirectly in places such as lumber, mining, and construction camps, fraternities, sororities, commercial or social institutions or the like. It was pointed out that the use of uncolored oleomargarine is not restricted when a sign is displayed prominently where meals are served bearing the words, "Oleomargarine served here."

NEW YORK AUGUST MILK

Dairy farmers will be paid a uniform price of $3.95 per hundredweight for their August deliveries to pool-approved plants in the six-state New York milkshed, according to a forecast released by Dr. A. J. Pollard, Acting Market Administrator of the New York metropolitan milk marketing area.

GEORGIA SHORT COURSES

The Dairy Department of the University of Georgia announces four short courses to be offered during the coming year: The first is the Market Milk Course, scheduled for November 21 and 22, devoted to a discussion of problems pertaining to the operation of the milk plant. The second, January 16 and 17, is concerned with the manufacture of cottage cheese. The third, January 24 and 25, is the Dairy Farm Short Course, and the fourth, March 21 and 22, has to do with the production of ice cream and sherbets.

BEAT HIGH COSTS-GET BIGGER YIELDS with ROYSTER!

TOP-QUALITY fertilizer pays off! Now you must get the maximum yield from every acre to beat declining prices. Dairymen report that Royster's gives bigger, better yields . . . brings back up to $10 profit for every dollar invested. That's why Royster's is the dairyman's best investment.

Royster 6-Plant-Food, Free-Flowing Fertilizer gives you chemically-controlled amounts of *all* six of the plant foods most soils lack and all crops *must have*. For 65 years Royster has made *only one quality fertilizer*—the finest. See your Royster Agent today!

Royster's supplies chemically-controlled amounts of all six plant foods needed to give your crops a full meal:
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WHY FEED YOUR CALF DOLLARS?

When you can feed KAFF-A

The safe replacement for milk!

Sell your cow's milk! Don't waste it on your calves. That's just like feeding them dollars! Low cost Kaff-A is an absolutely safe replacement for milk! When you feed Kaff-A, the milk your cows produce goes to the dairy—puts dollars in your bank account. Just 1 lb. of Kaff-A can replace up to 10 lbs. of milk in calf feeding. That means every 50 lb. box fed with low-cost hay and grain can release as much as 500 lbs. of milk you can sell! A handsome extra profit!

With Kaff-A no milk is needed after the 10th day. Kaff-A is tested, tried, proved a safe replacement for milk. A million healthy heifers have already been raised on it! Its dried buttermilk base is known for its nutrition. In addition, Kaff-A contains other dairy by-products, some cereal products, and plenty of Vitamin A and D Feeding Oil!

Don't risk your calf's health on inferior imitations of Kaff-A. A few pennies saved now may cost you many a dollar if your calf becomes a stunted cow. Feed Kaff-A and be sure that your calves get the nutrition that helps develop good milkers . . . good breeders!

Consolidated Products Company, Danville, Illinois

Makers of Semi-Solid Emulsions

KAFF-A

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another money-maker for you from CONSOLIDATED

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Now! MORE MEAT, MILK & EGGS in every bag for you!

MORE THAN EVER BEFORE

Brand new, proved nutrition factors in Wayne give your birds more feed-power for more eggs . . . steadier laying . . . lower production cost. Improves hatchability, too!

MORE THAN EVER BEFORE

New feed-power in Wayne Dairy Feeds, proved by months of exhaustive tests, gives you the means of getting more milk per cow, longer lifetime production from your herd.

MORE THAN EVER BEFORE

Improved feed-power of Wayne Hog & Cattle Feeds brings you all that's new in animal nutrition. Speedy gains . . . short feeding periods . . . more net profit for you!

TOMORROW'S FEEDS...TODAY

Never-ending studies at the Allied Mills Research Farm (above) plus scientific tests for "IQ" (Ingredient Quality) continually bring you Tomorrow's Feeds . . . Today!

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Your friendly Wayne Feed Dealer has these powerful new feeds for you NOW. Put them to your own test, under your own conditions. Whatever your present feeding set-up, you'll soon prove to yourself why *now* . . . more than ever before . . . it *pays* to feed Wayne!

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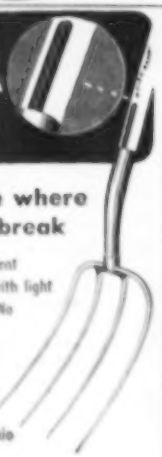

unbreakable where other forks break

Steel beam reinforcement gives super-strength with light weight, lively action. No premium in price.

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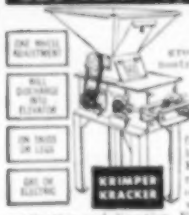

Stop wasting grain with hammermills. Stop feeding dusty, ground grains that clog rumen and stomach, are unpalatable, cause scours, bloat and tail-enders. Now roll-crimp your grains for greater feeding profits. New low-cost Krimper-Kracker genuinely roller-crimps corn, oats, barley, maize, wheat, etc., for full mastication and digestion. Full absorption helps cattle to early bloom, faster growth on less grain. Crimping makes grains bulky, doubles volume: **makes 4 bushels do feeding work of 5.**

PAYS FOR ITSELF QUICKLY!

Krimper-Kracker's low cost will make you extra profits from one season can pay for it. A size for every farm—¾ to 25 HP. 4000 to 30,000 lbs. per hr. Requires only 1/4 the power of hammermills. Wagon box loader optional. Write for free literature and prices today! AGENTS! Honest, steady profits, write for territory.

R. G. Davis Sons, Box HA-1, Bonner Springs, Kans.

Safety First for Cattle, Too

(Continued from page 651)

closely. The control of mastitis lies largely in managing in such a way as to prevent the disease rather than to depend only on treating it after it gets started.

Good milking procedures are very important. Mastitis is either very difficult or impossible to control with careless milkers. In one herd changing the solution used to wash the udders from one which was very irritating to both hands and udders to one which was not, appeared to help in controlling a bad outbreak of mastitis. The cows should be milked as gently, as quickly, and as completely as possible.

The second step in trying to increase the time cows stay in the herd is to inspect the cows themselves for tendencies towards defects. This may be only indirectly related to a safety first program, but some cows naturally live longer than others. In one good herd a sire was used whose daughters had a weakness of fore udder attachment. No matter how good care they received they could not last for more than two or three lactations. Bad legs and bad shoulders are both inherited and both reduce the useful years of a cow's life. Excessive breeding trouble can many times be traced to the progeny of one sire.

The third step deal: with raising as many calves and yearlings as possible to milking age. Some figures on calf losses have been published in recent years though there does not seem to be any general agreement as to what per cent of the calf crop can be lost and still have good management. However, many herdsmen who are doing a good job keep losses below six per cent year after year. A few have done better than that though their results have been exceptionally good.

As with other cattle diseases, the best method of keeping calf losses low is to prevent disease rather than depending on curing it.

One herdsman was worried about his calves several years ago. The calf pens were crowded to the point where any calf disease would be serious if it were allowed to get started. He had just hired a new calf man who was a willing worker, but one who knew nothing about cattle. When he started on the job, the herdsman told him that besides the good pens and rations they already had, there were just three things he needed to do to keep his calves healthy. One was to weigh or measure out the milk. He should always feed warm milk. The pails he used to feed the calves should aways be scrupulously clean. During the four or five months he worked, they had no trouble. Then he and the herdsman both left at the same time. The calves immediately became sick under the new calfman, and the new herdsman was much more interested in purchasing anti-scour serum and other remedies than he was in seeing how the calves were cared for. The simpler methods were both cheaper and more effective in keeping calf losses at a minimum.

There are other items in good calf management which need to be watched to prevent trouble. Some of these are for new born calves. Milk a few strippings from each teat of the dam to be sure there are no obstructions and the milk is normal.

Newborn Calf Needs Attention

The new born calf needs special care when the dam is sick and cannot provide that valuable colostrum milk from the first 24 or 48 hours. My father once sold a calf before it was born, provided it was a bull,

"Stranger, we jest couldn't farm this country without them B. F. Goodrich Power-Curve tires."

On hillsides, on hard-packed land, in soft spots or on turf—no matter where you drive your tractor, you'll find that the new B. F. Goodrich tires with Power-Curve cleats give you more traction than you ever had before. These tires have the open-center tread with cleats higher in the center than those of the other two leading makes. Cleats are hard-nosed—for quick penetration. The curve reinforces the cleat so it won't bend. You get full traction, power to bite, power to pull and self-cleaning action. Long wear, too. See these tires before you buy. Power-Curve costs nothing extra. And specify B. F. Goodrich tires when you buy a new tractor.

An advertisement of The B. F. Goodrich Co., Akron, Ohio

at what was then a good price. The calf was a bull all right, but the dam developed milk fever and had no milk. We failed to give the calf any special albumin foods. We lost the calf and the money we had hoped to get for him. I have often thought since how simple it would have been to have fed him eggs along with the normal milk. We probably would have saved him.

Do not use a big rope without a swivel to tie a tiny calf. The chances are the calf will hang itself before you see it again. Do not water calves in an old paint can or use a lead paint where they can get at it. Do not let calves suck each other. Sucking causes udder injury. When these calves freshen, they are apt to have blind quarters.

Calves should be fed good quality hay. If this is not good or if the calves are troubled with scours, some additional vitamins A and D in the ration, perhaps in the form of fish liver oil, may give better results. Keep calves out in the sunshine as much as possible.

Calves Need Good Housing

Proper housing is as important with calves as it is with cows. Many calves are unthrifty because of cold, wet, drafty pens. Usually such pens can be made more comfortable with small cost which will be paid back quite soon in lower calf losses and thriftier calves. On one farm the calves were housed in the most exposed part of the barn. A small amount of additional heat could have been made available, but the very moderate cost was considered too great. Shortly afterward two seven-day-old calves died of pneumonia during a prolonged cold spell. On another farm where the calf pens were cold, losses were reduced by allowing the manure to accumulate to provide a warm bed.

On one Wisconsin farm moisture condensed on the walls next to the calves whenever it got cold, causing drafts, wet floors, and dead calves. They stopped their calf losses by either moving the calves out into improvised pens in empty stalls between the cows or by making a false wall of baled straw in the back of the calf pens. The things in calf barn construction which cause calf losses are usually not difficult to correct. Most losses come from the owner not recognizing that such changes need to be made until he has suffered severely.

Each individual farm has hazards which are characteristic of that farm only. A good herd owner is always anticipating possible accidents in his own herds and pastures. When cattle are injured, the reasons for the injuries are carefully analyzed. Then steps are taken to prevent as many accidents as possible. The costs can be very little. The results will go a long way toward rapid herd improvement and additional profit.

Every DAIRYMAN WINS!
MARLOW MILKER
"BEFORE AND AFTER" SWEEPSTAKES

$1000.00
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Only a MARLOW MILKER
Gives HEALTHIER UDDERS
INCREASED PRODUCTION • GREATER PROFITS
EASIER CLEANING

He Says: Hundreds of practical dairymen have written us, telling how the Marlow Milker eliminated the major cause of mastitis in their herds, boosted milk production, increased profits. But accept nobody's word but your own. Enter the "Before and After" Sweepstakes and prove the Marlow's superiority to your own satisfaction.

J. C. MARLOW

What Others Say—

Ernest Boyle, Axtell, Kan. says: "Our cows' udders are in better condition. My production and profit are up."

John Legatt, St. Joseph, Minn., says: "Since installing the Marlow, mastitis has been eliminated. My cows like it and produce better."

F. E. Rider, McComb, Ohio, says: "My cows definitely have better udder health and production is up since my Marlow was installed."

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Please send me complete details on the Marlow Milker "Before and After" Sweepstakes.
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EXTRA...

CORALOX is AC's patented spark plug Insulator. It gives you that "something extra" which is always vital to outstanding performance.

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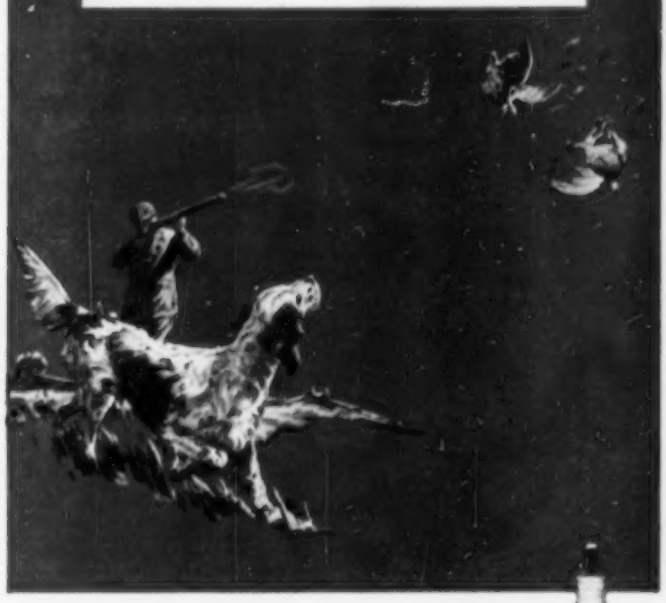

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AC SPARK PLUG DIVISION • GENERAL MOTORS CORPORATION • FLINT 2, MICHIGAN

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gives a faster, more complete rate of kill than any other commercial bactericide

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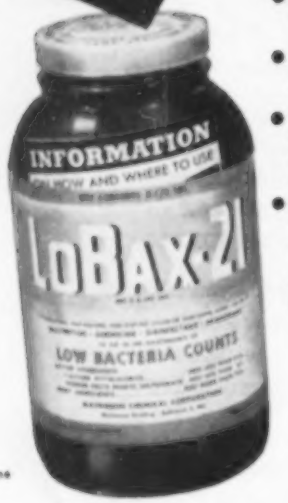

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SERVING INDUSTRY, AGRICULTURE AND PUBLIC HEALTH

Clover-Sorghum and Three-Way Profits

A. J. Bryan

A fine three-way profit from a continued cropping of grain sorghum and Dixie crimson clover is proving a bonanza in South Carolina and the Southeast.

Dixie crimson clover, being an excellent reseeding legume, an initial planting in combination with an adapted grain sorghum, reseeds itself indefinitely, so that only the sorghum has to be reseeded annually. The result of this combination is three-fold: a crop of grain sorghum seed, a crop of clover seed, and a good supply of winter grazing, not to mention the natural improvement and conservation of the soil.

Experiences of farmers and tests by experiment station research workers are proof that it is a profitable practice. Specifically, the South Carolina Experiment Station reports carefully conducted tests in 1947 and 1948 with the following results:

Dixie crimson clover was sown between the rows of sorghum in the fall of 1947 on Cecil sandy loam soil. Following the sorghum seed harvest an excellent crop of clover was produced and combined. Then the land was prepared and a second crop of sorghum was planted in 1948.

Ample clover seed had shattered on the soil and the seed (having a hard seed coat) did not germinate until the next fall, producing a thick stand before the 1948 crop of sorghum was harvested. After the sorghum harvest and the clover had made good growth, cattle were grazed on the land, consuming the sorghum residue as well as grazing on the clover, which later produced a good seed crop.

This clover-sorghum combination, which offers possibilities of being continued indefinitely, produces 35 to 40 bushels of sorghum seed per acre, 200 to 300 pounds of clover seed per acre, and valuable winter grazing.

The initial seeding of clover is 20 pounds of well inoculated seed; the sorghum is seeded six to eight pounds per acre in rows, following an application of 400 to 600 lbs. of 3-12-6 fertilizer per acre.

Removes Feed Flavors

Several different types of feed flavors can be removed from milk by blowing air through it, according to W. M. Roberts, F. M. Haig, and M. L. Shumaker, who have completed several trials of the new method at North Carolina State College.

The process consists of heating the off-flavored milk to 150 degrees F., and blowing filtered air through it until the flavor is removed. This usually requires from 20 to 60 minutes, depending on the intensity of the off-flavor. It is necessary to spray milk by circulation into the vat so that the foam which forms can be dispersed. After the flavor is removed, the milk is homogenized at 2,500 to 3,000 pounds per square inch pressure, and cooled.

Practically all volatile feed flavors are eliminated by this treatment. The milk has normal keeping qualities. From 3 to 8 per cent of the water is lost by evaporation.

Blaine Erhardt, tester, Moultrie Co., Illinois, DHIA says that one of his members found that phosphate used on the dairy barn floor helps him keep it dry and clean. He says the phosphate absorbs the water and makes the floor much easier to clean. He also pointed out that the phosphate is spread on the field with the manure.

DON'T LET WATER PIPES FREEZE

USE FUSED ELECTRIC THERMOTAPE

READY TO USE! JUST PLUG IT IN!

It's 100% SAFE. Comes ready to use. Simply wrap THERMOTAPE around the pipe or article to be protected from freezing and plug it in. That's all there is to a THERMOTAPE installation.

You can depend upon THERMOTAPE. Used with a SMITH-GATES Thermostat, THERMOTAPE goes to work when the temperature drops to near freezing.

100% SAFE

POULTRY WATER WARMER

Just plug the lead cord into outlet and immerse the heating unit in water . . . that's how simple it is to use. The built-in thermostat automatically turns on-and-off the current. It works only when the weather is cold.

PAIL WATER HEATER

Portable immersion type. For sanitizing poultry, cleaning eggs, dairy use and for heating water by the pail-full for other purposes. Thermostatically controlled to keep right temperature. Rugged, rust-proof, dependable and safe.

SMITH-GATES CORP. PLAINVILLE, CONN.

INVESTIGATE BADGER BARN CLEANER Pitless

- FULLY GUARANTEED
- EXTREMELY LOW COST
- NO UNSANITARY PIT
- SIMPLE INSTALLATION
- HUSKY 10-TON CHAIN
- MEETS GRADE "A" INSPECTION
- PRECISION POWER UNIT

WRITE FOR INFORMATION

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Finest— Newest— Hand filler!

The New Han-D: Tank Capacity, 15 gallons. One set of bottle guides. Only one quick adjustment necessary to accommodate any size or shape bottle.

Patents applied for.

Here's the new Cherry-Burrell Han-D Bottle Filler and Capper! Ideal for small as well as large dairy plants. The Han-D has sanitary, easy-to-clean contact surfaces of polished, non-corrosive, stainless steel—pays for itself in economy of operation.

Round or square half-pints—pints—quart bottles—even gallon sizes are all the same to the versatile Han-D Filler. Designed for fast, uniform two-valve filling and capping by just one man, the Han-D operates at a capacity of 12 to 14 quart bottles per minute.

See your nearest Cherry-Burrell representative or write for full details and catalog.

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FACTORIES, WAREHOUSES, BRANCHES, OFFICES, OR DISTRIBUTORS AT YOUR SERVICE IN 56 CITIES

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AMERICA'S NO. 1 FARM ANIMAL FOOD

START YOUR CALVES RIGHT FROM THE START WITH Mutual DAIRYADE CONTAINS Stabilized VITAMIN A

It's important when feeding baby calves to know that the product you are using is the finest that scientific research can provide. No wonder so many dairymen from coast to coast feed Mutual Dairyade for high quality and low cost. Why don't you start feeding Dairyade now—it's guaranteed to satisfy or money back.

Your Milk Plant has Dairyade IN 25 LB. METAL PAILS AND 100 LB. FIBER DRUMS

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Prices from $99.50 up

Here are the tractor diggers you have been waiting for. Quickly hitched to most any farm tractor with power take-off. Fastest power auger return—pull cord control. Heavy 6-speed two-flight auger—leaves hole clean. Cushion wheels permit fast and accurate settings. Safety clutch prevents damage, eliminating shear pins. Strictly a one-man digger. All controls from driver's seat. Short-cut to labor problems where holes are needed. Get up-to-the minute facts by sending for descriptive matter and low factory-to-user prices.

New Low Prices

Serving farmers for 64 years.

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NO HORNS!

One application of Dr. Naylor's Dehorning Paste on bare button of calves, kids, lambs—and no horns will grow. No cutting, no bleeding. 4-oz. jar—$1.00 at your druggist's or postpaid (prepaid).

H. W. NAYLOR CO. Morris 12, N.Y.

Dr. Naylor's DEHORNING PASTE

Identical Twins -- Identical Production

SPRUCE Row Triune Gertrude and Spruce Row Triune Glenda (above) are twin, registered Holstein cows, owned by Z. C. Kline of Ohio. Even though twins are quite common in dairy cattle, Gertrude and Glenda are unique in that upon close examination it was found that they were identical twins.

According to Dr. L. O. Gilmore, geneticist at Ohio State University, who is making a study of multiple births in dairy cattle, identical twins occur once in about every 1,000 births. Their main distinguishing features, according to Dr. Gilmore, are similarity in color pattern, physical appearance, and temperament.

Gertrude and Glenda qualify on the above scores and have gone one better by making almost identical production records in DHIA as three-year-olds. Calving within a few days of each other with lactation periods within a few days of the same length, Gertrude finished with a record of 15,095 lbs. milk and 537.8 lbs. fat, while Glenda finished with a record of 14,907 lbs. milk and 535.5 lbs. fat.

Among other features which distinguish these cows as identical twins are the whorls (cowlicks) in their foreheads. They twist in opposite directions and are located in exactly the same place in each forehead.

Both cows have official type classifications of Good Plus, and according to the tape, their weights are within fifty pounds of each other.

When the herd is on pasture, Gertrude and Glenda generally stay pretty close together.

—GEORGE NICHOLS.

★ ★ ★ ★

Cheese Is Cornerstone of Wisconsin Dairy Industry

Cheese is the cornerstone of Wisconsin's dairy industry. It is as much a symbol of Wisconsin as the Badger or the dairy cow.

It was the first dairy product for which Wisconsin acquired a national and international reputation, following the Centennial Exposition in Philadelphia in 1876. Wisconsin cheese is known and recognized throughout the nation and is familiar to more American consumers than any other product of our 2,500 dairy plants.

From an economic standpoint, cheese is also the dairy farmer's most important product. And here is the reason: A larger proportion of our annual milk production is used for the manufacture of cheese than for any other dairy product.

Approximately 35 per cent of all our milk is used in the manufacture of cheese. With an annual production of 15 billion pounds of milk a year, this means that 5¼ billion pounds are used for making cheese.

To realize further the tremendous importance of cheese to the dairy farmer, let us look at the part it plays in his annual income:

Last year (1949) the cash farm income in Wisconsin was $940,000,000. About one-half of this income is received for the sale of milk—or about $470,000,000. Since more than one-third of the milk produced on our farms is used for making cheese, our farmers received for milk sold to the cheese factories the significant sum of approximately $165,000,000. This is the largest single source of farm income in Wisconsin.

Now let us look at cheese production itself — the volume of cheese made by the Badger cheese factories. Figures used are for 1948 as detailed reports for last year are not, as yet, available.

In that year Wisconsin produced 502,104,000 lbs. cheese, almost one-half of the total national production of 1,094,425,000 lbs. This means that Wisconsin dominates the nation's cheese production. No matter where Madame Consumer buys cheese—and that means natural cheese — at least one-half of her purchases are Wisconsin cheese.

In 1948 we made 386,000,000 lbs. American cheese. That represents three-fourths of our entire cheese production. It is also 45 per cent of all the American or cheddar cheese made in the nation. About three-fourths of all the cheese made in the United States is American made.

That's the story of Wisconsin's cheese industry. It shows why Americans think of Wisconsin every time they think of good natural cheese.—Wisconsin State Department of Agriculture.

Bryce Landt Memorial

Bryce Landt, former president of the American Dairy Association of Wisconsin, was killed in a tragic auto accident several months ago. Prior to his death, he planned on erecting a 4-H club building. Since his passing, Mrs. Landt has been determined to complete the project as a memorial.

The many friends of Mr. Landt, both in the dairy industry and outside of the industry, have expressed a desire to take part in a memorial. As a result, the Bryce Landt Memorial Committee has been formed to raise funds to complete the project. Any and all contributions should be forwarded to the Landt Memorial Committee and made payable to that committee. Please send any remittances to Gordon B. Reuhl, general manager, American Dairy Association of Wisconsin, Tenney Building, Madison 3, Wisconsin.

What's well begun is half done.

OH! WHY?

DOESN'T THE BOSS FORTIFY MY REGULAR DIET WITH PROFITABLE

VIGORTONE'S

World Famous DAIRY SPECIAL

Here's a combination of blended ingredients that helps bring harmony to your dairy ration by adding vitamins, minerals, trace elements and live cell yeast. Dairy Special No. 30 is specifically made to help achieve and maintain better condition and top production in dairy herds. Dairy Special effectively and economically supplements your dairy ration to make up for nutritional deficiencies of hays, grain and other soil products.

Dairy Special can be fed free choice — added individually — or premixed at an investment of only a few cents per head per day. Highly concentrated, Dairy Special combines readily with all types of grain, pulp and roughage. It promotes substantial savings in feed costs due to improved digestion and assimilation.

Now is the ideal time to plan your Fall and Winter Feeding Program. Vigortone's famous Dairy Special effectively fortifies any dairy ration at low cost. Dairy Special pays for itself many times over. Hundreds of successful Dairymen depend on Dairy Special year after year.

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Mail Coupon Today For FREE Magnetic Breeding Calculator

Simply set at breeding date of cow, mare, sow, ewe or dog . . . and date of expected birth is promptly indicated. As a dairyman, it is yours at no cost. No obligation. Write for it at once. We will also enclose interesting literature which tells how you may increase your milk profits by the regular use of DAIRY SPECIAL . . . the world-famous dairy ration supplement.

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EDITORIAL COMMENT

RELIABLE SIRE PROOFS

THERE appear to be two schools of thought on obtaining a reliable proof on a dairy sire. In artificial breeding circles the predominant thinking holds that the most severe and reliable test of the sire is one that tends to cancel out a great part, or all, environmental influences. These people believe that a sire proved on 20, or more, dam-daughter comparisons in as many different herds gives a more reliable yardstick of a sire's transmitting ability than any other test available for use.

The other school of thought is that sire proofs are reliable only when the dams and daughters are tested under very carefully controlled conditions. They believe that the records of the dams and daughters should be made on the same kind of forage and grain, under similar conditions and identical care.

There can be little argument with the desirability of the latter type of proof because, if the conditions are well enough controlled, we know whether or not the bull is transmitting higher or lower than the dams under this given set of environmental conditions. From a practical point of view, however, the dairy farmer is interested in one primary consideration. Which sire or sires of many are best? He wants some reliable yardstick that will aid him in the selection of sires to be used on his herd. In a great many of our dairy herds that selection is available through artificial breeding. There are over 2,000 sires in service in artificial breeding associations at the present time. From 25 to 30 per cent of these are proved. On January 1, 337,000 farmers had nearly 3,000,000 cows enrolled in artificial breeding associations.

Now, let us take the problem of proving sires under the two plans set forth above. It is not hard to visualize the magnitude of the problem of proving enough sires to adequately service our artificial breeding associations if the carefully controlled environment and optimum conditions of production are provided for all dams and daughters of these sires. Such a plan has been proposed for development in this country. We seriously doubt the advisability of it.

In our opinion, a five comparison proof, made under DHIA conditions, is nothing more than a starter in sire selection. The level of production, the environment, and many other factors must be considered. Greater numbers of comparisons add to the reliability of a proof. Oftentimes these are not available because the sire may be proved in but one small DHIA tested herd. Reproving through artificial breeding is time-consuming, to be sure, but it is a more valuable check on the actual transmitting ability of the sire concerned.

It has been shown that, on the average, carefully selected young sires do a very creditable job in artificial breeding associations providing they are selected on the basis of a careful herd, dam, and sire analysis. If the New York experience in selecting young sires and proving them through artificial breeding can be repeated in other states, then we believe the benefits derived through early proving outweigh the disadvantages accruing through the occasional use of a young sire that does not prove as desirable as hoped.

The major problem facing artificial breeding associations is that of locating high transmitting sires when they are young enough to have a long period of valuable service ahead of them. For this reason, we believe—as in all business—there is justification in making an investment or provision for the future. The sampling of a limited number of young sires annually, then retiring them from service until proved, is such an investment assuring reliably-proved, high-transmitting sires for the future.

This does not infer, in any way, that the present program of purchasing well proved, high transmitting, mature sires should be discontinued or limited. The fact remains that no more than 30 per cent of our sires used in artificial breeding work are proved today. It is true, however, that a higher percentage of our cows are bred to proved sires because the proved sires are more heavily used than the younger sires. Our point is that every artificial breeding association using young sires should have a definite plan for sampling them, retiring them from service, making final selections upon artificial proofs, and then using those high transmitting, artificially proved sires to their full capacity for the rest of their active lives.

★ ★ ★ ★ ★ ★

OLEO IN SOUTH AFRICA

IT WAS not surprising to learn many months ago that the oleo manufacturers in South Africa were endeavoring to pirate butter's golden yellow color. Fortunately for the people of South Africa and their future, the Parliament recently passed an amendment to the Dairy Industry Act which showed understanding and foresight, obviously lacking in the majority in our Congress.

The amendment to the Dairy Industry Act provides that no person shall "manufacture, sell, or import into the Union margarine whereof the colour, measured in terms of the Lovibond tintometer scale, contains more than one degree of yellow or yellow and red collectively."

The act further provides, and this is significant, that no person "shall sell or deliver to any person any colouring substance intended to be added to or mixed with margarine."

There are many other incidental provisions of the Act but certainly the foregoing are sufficient to indicate the position of oleo in South Africa, and how it is regarded as a part of the human diet. Furthermore, it is obvious, from the color provisions, that the Parliament in South Africa recognizes the right of butter to its main identifying characteristic.

BANG'S REDUCED 30 PER CENT

WHEN nationwide testing for Bang's disease began July 1, 1934, an early summary by Hoard's Dairyman showed that nearly 15 per cent of the cattle tested reacted to the agglutination test. In the first complete year of testing, the Bureau of Animal Industry of the United States Department of Agriculture reported 11.5 per cent reactors in 3,300,000 cattle tested.

In the cattle reduction program that followed during the depression years, reactor cattle were moved out of herds in order to help reduce the surplus of dairy products on the market. The result, in 1941, showed that the national incidence had been decreased to 2.4 per cent on an annual test of 7,500,000 cattle. The incidence doubled during the war years to the point, in 1946, when 5 per cent of 4,900,000 head tested reacted to the blood test.

Since 1946 the tide has been reversed and a message just received from B. T. Simms, chief of the Bureau of Animal Industry, reports that nearly 6,000,000 head of dairy cattle were tested for Bang's disease in the year ending June 30, 1950. Of that 6,000,000 head 3.5 per cent reacted, representing a 30 per cent reduction in reaction since 1946.

In our opinion, these figures are somewhat lower than the actual national incidence because all of our cattle have not been tested. Many infected herds are festering along from year to year without any work being done to locate the reactors and replace them with vaccinated, resistant heifers as they come into milk production. The inclusion of these reactor herds would, of course, raise the incidence but, it should be pointed out, that it would raise the incidence not only in 1950 but also in 1946.

Certainly there can be no doubt but that the Bureau figures show a very definite trend for the better. We believe this trend will continue and that the year is not far off when we will surpass the all-time low of 1941 and have Bang's disease well backed into the corner.

The greatly expanded use of calfhood vaccination, the continued regular use of the blood test, and the exercise of good judgment and perseverance give us reasonable assurance that the task of lifting the brucellosis burden is not at all impossible but rapidly becoming a reality.

FORCED TO GRASS

CROPPING out in some of the farm program proposals in recent months has been the provision that the government will encourage financially the conversion of much cropland to grass and its associated livestock agriculture. Insofar as the nutrition of our people and the soil-conserving nature of this type of farming are concerned, no policy could be sounder and make a greater contribution to the nation's welfare.

For many, many years we have endorsed and served soil-conserving, animal agriculture — a permanent agriculture. We do question, however, today how enthusiastic we should be about the government's cash and encouragement to a large number of farmers to convert to livestock. In the dairy industry we have had difficulty in selling all of the milk and other dairy products that we are now producing. We had had trouble selling them, at least, at a reasonable price.

Witness, for example, the drop from $5.00 to $3.00 per hundred for milk in some areas. Should we wholeheartedly embrace, therefore, this proposal to put more farmers into dairying? Until such time as we have more outlets for products to absorb our milk production at a reasonable price, we hope that some of the authors of these government-encouraged livestock programs will incorporate into their programs specific proposals for handling the increased production of animal products.

LOVED HIS BOSSY

A FRIEND told us a good story the other day. He was very proud of his fourteen-year-old son who, he said, was wonderfully successful with farm animals. One evening the boy was late about coming in to his supper after the chores were done and the father went to the stable to look for him. Noticing the glimmer of the lantern, he looked in and saw the boy with his arms about a favorite heifer's neck and he was saying: "Bossy, I love you ever so much, and you shall have all you want to eat." That boy would create twice the value in a heifer that some full grown men would, because he had a love for his work and a high standard of duty to the things committed to his care.—W. D. HOARD, May 17, 1907.

THE language of truth is unadorned and always simple.—MARCELLINUS.

Shavings for Bedding

I am using hardwood shavings in my barn for bedding with oat straw —about half and half. People say if I haul this manure on my cornfield it will do the land and corn crop more harm than good. I do fall plowing for all my crops.
Chaska, Minn. C. W.

The question relative to the mixing of hardwood shavings with oat straw for bedding has been referred to me. Shavings make a good absorbent for liquid manure and likewise make good bedding. There is this factor, however, that where used in excess they may have the effect of stimulating the growth of microorganisms in soil which in turn feed up some of the nitrogen. I tell farmers that where used in moderate amounts in cow barns (1" to 2" in the gutters) there will be no injurious effects from shavings. Where excessive amounts, however, are applied to the land they do stimulate the growth of molds and other fungi which in turn eat up the nitrogen in the soil. After they have rotted the cellulose contained in shavings or straw, then the nitrogen contained in the tissues of their bodies becomes available to growing crops. It is frequently too late in the season to be helpful to the crop itself.

Yes, you could rot down your shavings manure in piles and apply it several months later as a top-dressing to new seedings or old hay lands. You are, however, losing some value in the organic matter and stand to lose some of the constituents in the manure during the time the manure is piled and subject to leaching rains. —C. J. CHAPMAN, Soils Specialist, University of Wisconsin.

Milk for Veal Calves

With good to choice veal calves selling for around 30 cents a pound in some areas, dairy farmers might well consider feeding milk to surplus bull calves and vealing them at three to four months of age.

Calves will double their birth weight in 80 to 90 days if well fed, and where milk is bringing less than $3.00 a hundred (particularly in manufactured milk areas) farmers may find it will pay to market as much milk as possible through veal calves.

There are two common methods of raising veal calves successfully on milk. They may be raised almost exclusively on whole milk, except for some hay, either on nurse cows or by pail feeding; or they may be fed whole milk the first month, followed by skimmilk at the rate of one pound for each ten pounds of body weight and as much good quality hay and grain as they will eat.

USDA dairy officials estimate that calves of the larger breeds fed by the latter method will consume about 300 lbs. whole milk, 750 lbs. skimmilk, 75 lbs. grain, and 80 lbs. hay the first 90 days, and weigh from 180 to 200 lbs. The smaller breeds would require somewhat less feed and should reach about 150 lbs. in 90 days. Assuming approximate current farm prices, the feed cost would be about $16, or 9 cents per pound of marketable calf for the larger breed and $14, or 10 cents a pound for the smaller breed.

Veal calves raised by the whole milk method will generally finish off at higher grades than skimmilk calves, but the feed cost will be more. The larger breeds would consume about 1,200 lbs. whole milk and 75 to 80 lbs. hay in 90 days and double the birth weight. At the assumed prices, the feed cost would be $37.20, or 18½ cents per pound of marketable calf, well below the selling price of veal calves. The smaller breeds will consume about 900 lbs. whole milk and 50 lbs. hay, and a feed cost of $32.25, or 24½ cents per pound of calf.

PROTECT YOUR COWS YOUR BARN YOUR HEALTH

WITH A

FAN-PAC DAIRY BARN VENTILATOR

PROTECT THE HEALTH OF YOUR HERD

Fresh, dry air is as necessary for livestock as for human beings, says the U. S. Dept. of Agriculture. FAN-PAC exhausts damp stale air and pulls into your barn the fresh pure air your cows need to stay healthy. FAN-PAC — a 2-speed electric ventilator — provides even barn temperatures without drafts.

PROTECT YOUR HEALTH

Dairy farmers spend an average of from four to six hours a day in their barns. Without proper ventilation, a barn will be wet, smelly and unhealthy. No factory worker would put up with such conditions — why should you? Install a FAN-PAC Dairy Barn Ventilator and help nature safeguard your health.

FAN-PAC is available in 3 models, for various size herds. Smaller size for ventilating poultry houses, too.

PROTECT BARN AND EQUIPMENT

Most farmers pay out money to insure their barns against the possibility of fire. But what about the *certainty* that excess moisture will rot your barn unless you act to prevent it? FAN-PAC provides a constant flow of air through your barn to help keep ceiling, walls and floors dry. You can't buy cheaper "insurance" against building decay.

SEND TODAY FOR FREE BULLETIN

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Please send free bulletin on FAN-PAC Dairy Barn Ventilator.

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MORE MILK... BETTER MILK... ...and only $60 to $65.00 A TON for FEED!

STANDARD'S BIG 5 Feeding Program

1. Saves on feed bills.
2. Includes regulators, tonics, vitamins, conditioners and minerals for better milk production.
3. Uses low cost home grown grains.
4. Safeguards your herd.
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Produce quality cream and milk on only $60 to $65 a ton for feed. . . . That's just one of five ways you're ahead with Standard's BIG 5 Feeding Program.

See how simple it is: You feed your home grown grains. Mix in Standard Feeding Compound (highly concentrated vitamins) along with vital conditioners, tonics, regulators in Standard Stock Tonic. Add Standard Dairy Cow Preparation for important minerals. Formulas well balanced. Used by 3 generations of dairy farmers. No filler. Standard Feeding Compound is extra rich in vitamins A, D, E, G (B2), and APF (B12).

Write for details on Standard's BIG 5 Feeding Programs for dairy cows, livestock, hogs, poultry; also free Home Feeder's Book. No obligation. Send postcard today.

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Let this FREE but tremendously valuable booklet start you on the way to DRY SPELL PROTECTION

PORTABLE SPRINKLER IRRIGATION
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ACTUALLY, there is more than protection against dry spell losses to be had from portable irrigation. There are *greater profits*, too, when land is irrigated this modern way. So say reports gathered from almost every type of farm and ranch, as well as nurseries, and other producing areas all over America.

The facts from such reports and the *why* of them make up only a part of the highly informative material covered in the new illustrated booklet that we'll be glad to send you.

It tells you of uses other than crop irrigation to which your system can be put—saving you both money and laborious work. It tells how you can—without cost or obligation—get the information you'll need about specific conditions in your locality and provide work sheets you can fill out to get specific recommendations on your particular acreage.

Let us send this booklet now and the name of the Reynolds Aluminum dealer who can help you in so many ways to plan for "your own rain" where you want it, when you want it. Just return this coupon.

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Another Dairyman discovers
IT PAYS TO MODERNIZE
with STRAN-STEEL
Quonset
DAIRY BARNS

This Quonset 32' x 72', adapted as a dairy barn by Ralph Herman, Hastings, Minn., provides 26 cow stalls, bull pen, milk room, and feed room—all under one roof.

Harlow Hadlock, New York dairyman, says his Quonset 40' x 140' costs less than any other building for the purpose—gives advantages no others offer.

Ralph Herman, Hastings, Minn. dairyman, figures his new Quonset 32, which qualifies him for Grade A milk production, will raise his income over $1000 a year. Herman says his sturdy Quonset gives better ventilation, more even temperatures, improved light. It's fire-safe, windproof, lightning-resistant and long-lasting . . . is already helping to pay off its original cost thanks to savings in time and labor alone!

Quonsets, for all dairy and farm uses, are immediately available! Modernize your dairy operation with an up-to-date, *permanent* Quonset now. See your Quonset dealer today.

YOU NAIL TO STRAN STEEL FRAMING

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Poultry Problems

H. H. ALP

Late Summer Colds

Late summer and early fall colds in pullet flocks can become quite costly, not so much because of mortality losses but because of the likely setback to prospective egg production.

These colds usually don't become serious or troublesome unless the range houses are overcrowded and afford no protection against severe weather changes.

Only a few weeks ago on a farm in northern Illinois we saw a thousand New Hampshire pullets about mature enough to start laying. They were in range houses with a capacity for housing about 500 birds. There was less than 50 per cent of the necessary roosting space and it made you shudder to think what could happen to such a fine flock of pullets if the weather should change adversely and catch these birds in such an overcrowded condition.

Overcrowding is one of the chief reasons for epidemics of colds, "sniffles", and the like, and it is poor protection to go on the assumption that you can tolerate overcrowding through the use of antiseptics in the drinking water and the like.

It won't be too long before we shall have some cold nights and wet, disagreeable weather. For this reason it would be a good plan to check the range quarters to see that the birds are being protected against exposure to this kind of weather. Too frequently a lot of the respiratory trouble in poultry starts in overcrowded, poorly ventilated, and drafty range houses.

Low Quality in Eggs

A lot of folks have the idea that once fall and winter temperatures arrive there will be no need to worry about egg quality.

Low quality market eggs during cold weather seem to result from the fact that eggs are oftentimes placed in rooms where there is considerable heat, such as kitchens or the basement near the furnace. Whenever artificial heat is used in an egg room, there is apt to be a drying out effect on eggs and when this happens quality quickly goes down. Humidity in the egg room is just as important during cold weather as it is during warm weather.

They Are Through

We were asked a few weeks ago what we would do with some two-year-old hens that had dropped off in production. Our answer was, start selling them. They are through! This is not a bad plan to follow with most birds that stop laying.

Pennies that PAY OFF in DOLLARS
Feed MORTON'S Free Choice TRACE MINERALIZED SALT

It costs only a few cents more per animal per year to feed Morton's Free Choice Trace Mineralized Salt. It pays off in terms of faster growth, lower feeding costs, more and healthier young, bigger profits. Trace minerals, with salt, stimulate enzyme, vitamin and hormone systems that build feed nutrients into blood, bone, tissue and milk.

FREE FOLDER For important information on feeding salt and trace minerals, write Morton Salt Co., P. O. Box 781, Chicago 90, Illinois.

MORTON'S Free Choice TRACE MINERALIZED SALT

Contains iron, copper, cobalt, manganese & iodine

POUR FOUNDATIONS BEFORE FROST!

Get better farm buildings with RILCO RAFTERS

● Plan now to pour the foundation for your Rilco barn or machine shed and complete its erection after corn picking. By building during the fall and winter months, you'll find it easier to get help and materials. Then, too, you won't be as busy at this time.

Think of these advantages when you plan, and before getting too far along, have a talk with your Rilco lumber dealer. He'll be glad to show you how Rilco post-free construction provides a roomier, more usable interior. He'll also point out the tremendous strength of glued-laminated wood framing, the engineered soundness of Rilco construction, the speed and ease with which Rilco buildings are completed.

Rilco rafters are available for farm buildings of all types and sizes. Better see your Rilco dealer soon or drop us a line requesting the Rilco pocket farm catalog . . . it's free!

RILCO WORKS WONDERS WITH WOOD
Laminated PRODUCTS, INC.
2556 First National Bank Building, St. Paul 1, Minn.

Boost Profits in Dairying

(Continued from page 649)

This grain usually is handled more times than any other raw material that goes into milk production. On some Michigan farms grain is handled as many as nine times from harvest to feeding.

Three major factors affect the time and work needed for grain feeding: Location of grain storage, barn arrangement, method of feeding.

Barn Arrangement Important

Here are some farm proven tips on saving time in feeding: Overhead grain storage in the barn cuts the handling of grain to a minimum. Grind and mix in one operation to reduce feeding work—farmers who put the supplement in while grinding need very little time for mixing. Use a feed cart large enough to hold grain for at least one feeding so the job can be done in one trip around the barn.

The farm management department of the University of Massachusetts found that arrangement of the dairy barn determined to a large extent the way a farmer does his chores. Three important factors affect the time spent in milking, caring for the milk and the herd: Arrangement of the dairy stable and location of the milk house; use of labor saving equipment; development of a work routine so the operator works while he walks and uses equipment as efficiently as possible.

Have the cows face out from a center alley wide enough to permit a spreader to be driven through the barn. Then the manure is handled only once. Even where gutter cleaners are installed, facing the cows out still is best—because most of the work still will be done behind them. About three-fifths of the time spent in dairy chores in the barn is spent behind the cows.

A milk house attached to the dairy barn saves time and hard work. For a herd under 16 cows, the milk house should be placed at the end of the barn. For larger herds, the milk house is best placed in the center. This arrangement means fewer steps and less time spent carrying milk to milk house.

Central cross alleys save work if the herd is large and two trips must be made with the silage or grain cart. A cross alley opposite the milk house entrance will save steps in taking milk to the house.

It is important to have enough hay chutes. A good rule of thumb is to have one chute for every 8 or 10 cows. They should be placed so the hay drops in front of the cows. Grain and silage should be fed from a cart in one trip around in front of the cows. Where more than one trip is needed, the silo is best placed along side of the barn—at the center opposite the cross alley.

Have at least one maternity pen and a calf pen in the dairy stable. They should be placed at one end and opposite each other. Pens placed in a line along the side of a barn slow up milking and cleaning.

Heifers kept in pens can be cared for with less labor than those kept in stanchions. Once more they get their exercise regularly and may make better growth.

Set up work areas around which chores are organized such as: One area near the feed room and silage chute to provide space for feed and feeding supplies; another area at one point in the milk house where the milker is assembled, rinsed, and taken down; and an area behind the cows for barn cleaning supplies.

Roughage Quality Too Low

Farmers have two problems in growing good roughage for their dairy herds. George Werner, University of Wisconsin dairyman, lists them:

One: You have to grow the crops that make good feed.

Two: You have to save the crops after they are grown. That means cutting at the right time and careful handling to save the leaves and the color.

At a series of forage clinics last winter he found that only about 35 per cent of the hay and silage was good or better. The rest was only fair.

"Far too much hay was cut too late to make good feed," he pointed out.

★ ★ ★ ★

New Florida Dairy Research Unit

THIS is the new headquarters of the Dairy Research Unit at the University of Florida, dedicated late in July. The main building at the left consists of the laboratory wing, main milking barn, milk room, and feed wing. The calf barn with experimental facilities on the right was built with funds provided by the Florida Milk Control Board. Two one hundred-ton silos are in the right background.

In the dedicatory address, given by Theodore Datson, vice president of the Florida Dairy Industries Association, previous research of the station as it applied to the dairy industry was reviewed and he concluded: "Florida dairymen are fortunate to have facilities here at the University to do more research along lines that will help us toward the ultimate goal of more economical milk and butterfat production and the maximum efficient use of locally produced feeds."

Training dairy leaders of the future is another use the unit will serve.

(Advertisement)

ARTIFICIAL INSEMINATION

I learned early in life by looking through a microscope that nature was extravagant with sperm cells. At that time I conceived the idea of breeding several cows or mares at one service of the sire. I immediately set to work trying to find all written literature on the breeding subject. All that I could find was that in 1882 a scientist bred a dog artificially.

Forty-seven years ago I saw in the future the great advantage of artificial breeding. At that time I patented a breeders' bag and an impregnator (on record at the patent office). I was ridiculed and was told that the calves would come without tails. I was determined to carry on this experimental work. I was convinced that it would make an extra good bull valuable. I hired a staff of professional men to work with me on this subject that is now being acclaimed as something new. At that time I was editor of The American Breeder. Many requests were received to see a demonstration on Artificial Breeding. I do not claim to be the man who originated Artificial Breeding but the man who gave it to the breeder in a way he could use it.

In the year of 1909 the first term of The Graham Scientific Breeding School was held in the Kansas City Veterinary College.

Early in our work we could not understand why one cow would get with calf and the next one remain empty. After a careful examination we could find nothing wrong with the organs of a sterile cow which is the greatest loss in the livestock business.

We tried all known methods of breaking cysts, squeezing out yellow bodies and draining pus without results. I made the discovery which redeemed 90 per cent of the barren cows of a breeding age, not ruined by human hands. It proved to be largely a matter of circulation, a dormant condition. Thousands of our students have proved this statement. The next big discovery was the control of Bang's Disease.

This school is brought to you at seventeen locations in the breeders' language. We can teach the average breeder or herdsman how to produce a calf annually. We are now securing semen from the bull without service and breeding cows by this method. We have another plan of breeding two or more cows at one service of the bull that any farmer can use. Our students were using artificial breeding in this country before it was introduced to the breeders in Europe. This information on breeding subjects cannot be secured elsewhere.

We fear that the subject of Artificial Insemination will be seriously damaged unless necessary changes are made. The percentage of calves is too small. Every technician should attend this school to prevent disease or injury.

Our research work continues on our two thousand acre Experimental farms.

Most of this work can be done only by the breeder or herdsman who is with the cattle daily. It would be too expensive to hire it done. It would require too many trips.

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Memphis, Tenn. — Nov. 21-26 — Gayoso Hotel
Ft. Worth, Tex. — Nov. 28-Dec. 3 — Hotel Texas
Kansas City, Mo. — Dec. 12-17 — Pickwick Hotel
Richmond, Va. — Jan. 2-7 — King Carter Hotel
Newark, N. J. — Jan. 9-14 — Hotel Essex House
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Chicago, Ill. — Jan. 30-Feb. 4 — Sherman Hotel
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Dairy Farm Home

Mixes Are Magic

. . . if you need to cook in quantity

. . . if you have unexpected company

. . . if you put up lots of lunches

by Marian Pike

ON GROCERY store shelves nowadays there is a prepared mix for almost everything—pastries, cakes, biscuits, pancakes, corn bread, gingerbread, puddings, ice creams, and many others.

Many of them are very tasty. For example, take a look at the luscious peach pie pictured. Its crust was made from a commercial mix.

Some of the prepared mixes cost no more than the same product prepared completely in your own kitchen. But those of us who have our own butter, lard, milk, and eggs will find we can often effect a savings in money by making up our own mixes. We have to figure our own costs and compare them with the commercial prices.

Certainly we can all effect a savings in time by having mixes on hand, ready for emergencies and for extra busy days. Once you have formed the habit of using commercial or make-your-own-mixes, you will understand what a fine help they are.

To the left below is a basic cake mix with variations. To the right, a pastry mix. You may divide or multiply either. Cakes and pies made from these mixes are every bit as good as those made in the usual way.

At first glance you may be spellbound by the huge amounts of flour, baking powder, etc. But they are not hard to work up if you clear a good big working space and plan to mix in dish pans instead of regular bowls. These mixes will certainly save you time in the long run.

One word of warning! **Measure accurately** when you make up your basic mix. Then you will have good cakes and pies and many of them.

Cake Mix

18 cups sifted cake flour
12 cups granulated sugar
3 tablespoons salt
11 tablespoons double-acting baking powder
4 cups (2 pounds) butter

Sift flour, sugar, baking powder, and salt together. Cut fat into dry ingredients with pastry blender or electric mixer until particles are like coarse cornmeal. Store in covered containers in cool place. Yield: Eight 2-layer or loaf cakes.

USING THE BASIC CAKE MIX

White Cake

4 cups minus 2 tablespoons cake mix
1 cup milk or water
1 teaspoon vanilla
½ cup unbeaten egg whites (about 4)

Measure mix lightly, without packing. Place in large bowl. Butter 9x13x2-inch oblong pan or two 8- or 9-inch layers. Dust pans with flour or line with buttered wax paper.

Measure milk and add vanilla to it. Stir half of milk into mix and beat batter for 2 minutes on medium speed if using electric mixer, counting only actual beating time if by hand. The more you beat, the better the cake. Batter should be smooth and glossy.

Add remaining milk in three parts, beating well after each addition. Then beat 1 minute.

Beat in the unbeaten egg whites for 2 minutes more. Pour batter into prepared pans.

Bake at 350° F. (moderate) oven: 8-inch layers about 30 minutes; 9-inch layers about 25 minutes; oblong, about 35 minutes. If glass baking pan is used, bake at 325° F. Cake is done if it springs back when gently touched. Cool 10 minutes before removing from pans.

Coconut Cake

Except for these changes, follow white cake directions:

Stir 1 cup coconut into mix before adding milk.

Use 1 teaspoon almond extract for the vanilla.

Substitute 2 whole eggs for the egg whites.

If desired, frost with boiled, 7-minute or confectioner's sugar frosting flavored with almond extract. To trim, gently press coconut into frosting while still soft. Scatter slivered, toasted almonds over all.

Spice Cake

Except for these changes, follow white cake directions:

Mix 1 teaspoon cinnamon, ½ teaspoon cloves, ½ teaspoon ginger into cake mix before adding milk.

Omit vanilla.

Substitute 2 whole eggs for the egg whites.

Frost with **Buttery Chocolate Frosting:** Over low heat or in double boiler, melt together ¼ cup butter and 2 ounces unsweetened chocolate. Add 2 tablespoons cream and 1 teaspoon vanilla. Remove from heat. Stir in about 2 cups confectioner's sugar until of spreading consistency.

Chocolate Cake

Except for these changes, follow white cake directions:

Melt 3 ounces unsweetened chocolate in 1⅛ cup water over low heat or in double boiler. Substitute chocolate mixture for the milk.

Add 1 teaspoon red food coloring.

Substitute 2 whole eggs for the egg whites.

Burnt Sugar Cake

Except for these changes, follow white cake directions:

Use only ⅞ cup milk.

Omit vanilla.

Add 3 tablespoons burnt sugar sirup just before eggs.

Substitute 2 whole eggs for egg whites.

Burnt Sugar Sirup: Melt 1 cup white sugar in heavy skillet over low heat until dark brown and smooth. Remove from heat. Add 1½ cups boiling water. Return to fire. Stir carefully until a dark molasses-type sirup is formed. Store in a covered jar in refrigerator. Sirup will keep for months, may be added to cakes, cookies, frostings, as you please.

(If you have never burned sugar before, do not remove sirup from heavy skillet until cool. You may have boiled it down until it is too hard. If this occurs, add ½ cup water, put over heat again, stirring until you achieve the molasses-type sirup you want.)

Burnt Sugar Frosting: To boiled, 7-minute, confectioner's sugar or butter type of frosting add 1 to 2 teaspoons burnt sugar. Amount depends on how dark and flavorsome you want the frosting.

Pastry Mix

12 cups sifted all-purpose flour
3 tablespoons salt
2 tablespoons sugar (optional)
3¼ cups fat (lard)

Sift salt and sugar twice with the flour. Cut half the fat into flour, etc. Mix with two forks or pastry blender until mixture feels like cornmeal. (Do not use your hands. Heat from your hands will melt the fat and prevent the finished pastry from being flaky.)

Blend in the other half of the fat until mix is size of small peas. Store tightly covered in plainly labeled jars in cool place (refrigerator).

Using the Basic Pastry Mix

For pie crust, tarts, toppings for meat pies:

Measure (do not pack) 2½ cups of mix.

Add gradually 4 to 6 tablespoons water.

Mix lightly with fork until stiff dough forms. Divide and roll out to ⅛ inch thickness on lightly floured board.

Fit and pat into pie tins to drive out air bubbles under crust. Bake according to directions for fruit or meat pie or tarts you are making.

Yield: Two 8" crusts or six 3" tarts.

Apple Sauce Cake

3 cups minus 2 tablespoons cake mix
1 teaspoon cinnamon
½ teaspoon cloves
1 cup raisins or dates, coarsely ground
¾ cup tart, thick applesauce
2 eggs

Mix spices and raisins into cake mix.

Add half the applesauce and beat batter for two minutes until smooth and glossy. Add remaining applesauce a little at a time, beating well after each addition. Scrape sides and bottom of bowl often. Beat in the unbeaten eggs for two minutes more.

Pour batter into buttered 8x8x2-inch pan, bake at 350° F. for 60 minutes — or until top of cake springs back when lightly touched. Frost with:

Orange Butter Frosting: Over low heat or in double boiler, melt ¼ cup butter. Add 2 tablespoons orange juice and grated rind of one orange. Remove from heat. Stir in about 2 cups confectioner's sugar until of spreading consistency.

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"Treat Your Calves Like Babies!"

MANY dairymen have said: "Treat your calves like babies." Why? Because we know that young calves are babies!

Just like other babies, your calves need fresh air, sunlight, and constant temperatures to make a good start in life.

These three needs are important to consider when you're planning to build a calf pen. Whether these three needs are met or not depends on where you build the pen, and how.

WHERE TO BUILD . . .

Where should the calf pen be built? Here are two possibilities that are perhaps most probable for you:

(1) In the same part of the barn where the regular milking herd is housed.

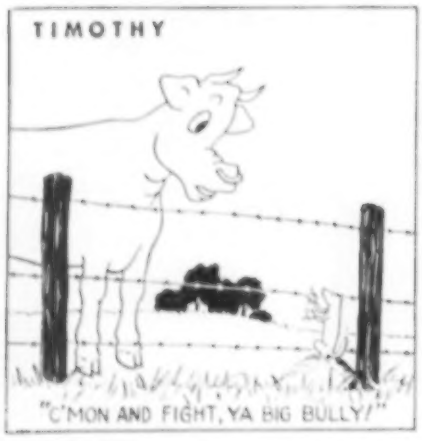
(2) In a separate part of the cow barn away from the milking line.

THIS MAY FIT . . .

For practical reasons you may want to build a calf pen in the same part of the barn where the milking herd is kept. Here's why:

(1) Young calves, like young babies, need constant temperatures. In the main part of the cow barn they can take advantage of the animal heat given off by the milking herd. If they are kept in a separate part of the barn or in a separate building they may not have enough warmth during cold weather months unless artificial heat is provided.

(2) It will be handier for you to feed and keep calves bedded and clean if they are in the same part of the barn as the milking herd. Whether you feed them on a bucket, bottle, or nurse-cow, it will be handier to have the calves close by. You won't have to carry their feed very far and you won't have to leave the building and get yourself or the calves cold by opening doors and letting cold air rush in.



WITH THE HERD . . .

Let's consider building a calf pen in the part of the barn where the herd is kept. First consideration is—where do you have room for a pen?

And when you are considering where to build the pen you run across another important point. A pen should be built where there will be no drafts for the calves. Many dairymen have trouble with pneumonia or other respiratory diseases of calves in winter. Much of the trouble can be traced to draft, not to the fact that the calves are kept in the same barn with other cattle.

IF ONLY ONE CHOICE . . .

If you have only one spot vacant where you can build a calf pen in the barn, let's say, for example, next to one of the walls, then that's probably where you'll have to build it. But if it happens to be the only spot you can put a pen, even though it might be in a drafty, dark place, then you'll have to plan on doing something about the drafts and the lack of light.

About the drafts—you can build a pen with a solid wall, perhaps four or five feet high. That will keep out some of the breeze. If there are cracks in the barn wall that let air rush in, then they should be covered with something to keep the air out. You might cover the cracks with cardboard, tarpaper, insulating board, regular wooden boards, etc. If there are 2x4 studs on the inside of the wall you might nail shiplap or other lumber on the inside of the studs and fill in the air space on the inside of the wall with wood shavings, ground corn cobs, or other insulating material.

QUESTION OF TEMPERATURE . . .

At this point we should consider whether calves must be kept warm, or whether they will do well in cool or cold temperatures when they are young. This question brings a lot of different answers from individual dairymen and is oftentimes the basis of argument.

Dr. L. H. Brown, of the Agricultural Experiment Station, Michigan State College, says: "There is some evidence that small calves will gain weight more rapidly if they are provided with warm quarters. Many farmers allow the dairy calves to be born under the existing cold conditions without noticeable ill effects."

So we see that some folks say you can raise calves successfully in cold temperatures, while others say you have to keep them warm to make them do well. The one thing nearly everyone will agree on, whether you raise them in warm or cold temperatures, is that the temperature should be constant or kept nearly the same. To put it simply—the calves should not be warm one hour and cold the next.

NEED FOR LIGHT . . .

For more light—if the spot where you build a calf pen is a dark one, it's well, if possible, to put in a window, even if it's a small one. Then, on warm days, the window can be opened to give them a sniff of fresh outside air. And, of course, it's well to turn calves out where they can soak up some sunshine on warm days.

We mentioned that calves should not be kept where there are drafts but that they should have fresh air—air that is not always stale from the rest of the herd. If calves are put into a barn with the rest of the herd where the conditions for all are very crowded, the air can become very stale and the ammonia from the manure can make the air strong and unhealthy for young calves. Some ventilation, either from windows opened a crack at the top or a ventilating fan up near the ceiling to take out stale air without causing a draft, is necessary.

KEEP THEM DRY . . .

Now that we've thought of providing light and fresh air for our calves and keeping drafts out, we should think of keeping them dry. Calves can get mighty dirty and uncomfortable in a wet stable. Just as a young baby has to be "changed" frequently to keep it dry and clean—baby calves do, too.

Raised floors, slanted so that moisture can drain down, may be the answer. If not a raised floor, constant cleaning and heavy bedding or continual addition of bedding on top of the old may do the trick.

COMMON SENSE . . .

There are few cases where you can apply a set of rules to the job of building a calf pen and starting young calves on their way to becoming cows. But if it's remembered that young calves are babies and need comfortable stables, the job of making good cows out of them will be much easier.

THE END

SPECIAL OPPORTUNITIES

— Where Buyer and Seller Meet —

The rate for advertising in this department is 30 cents per word per insertion, except for "help wanted" and "positions wanted" advertising which is only 20 cents per word per insertion. Count address. "J. W. Foley, Route 13, Green Bay, Minnesota," is considered as eight words. Blind advertisements must be signed: "BOX ##, care Hoard's Dairyman, Fort Atkinson, Wisconsin" and count as 8 additional words. Count each initial or group of figures as a word. SEND CASH OR CHECK WITH ORDER. Copy must reach us four weeks ahead of date of issue. NEW ADVERTISERS MUST FURNISH REFERENCES. Send order to HOARD'S DAIRYMAN, Fort Atkinson, Wisconsin.

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DAIRY Cows—Largest selection of high class dairy cows in Michigan. One or a carload, we have what you want. Unusually good selection of registered Holsteins of all ages at the present time. We can deliver cattle anywhere. MERLE H. GREEN & SONS, Elsie, Michigan. 3-*

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HUNDRED choice dairy cattle. Guaranteed as advertised. Transportation from Chicago. H. F. CLOW, Plainfield, Illinois. 17-*

BUY in Canada and save 10%. Ayrshires and Holsteins. PEARSON BROTHERS, Avonsyde Farms, Waterdown, Ontario. 7 miles from Hamilton, # 5 highway. 11-*

CATTLE MARKERS

DAISY Cattle Markers complete with chain, brass tag for horns and neck. Write for folder. GOLDEN ARROW FARMS, Dept. C, Huntington, Indiana. 16-*

DAIRY EQUIPMENT

REBUILT milking machines, all makes. Real bargains! MILKER EXCHANGE, Box 148-H, Mankato, Minnesota. 10-*

PASTEURIZERS, steam and electrically heated, 25 and 50 gallon sizes for small dairies and institutions. ROYCE L. PARKER, INC., Addison, Illinois.

FOR Sale—100 gallon Cherry-Burrell pasteurizing equipment complete including almost new refrigerating unit. M. BELFI, West Terre Haute, Indiana.

STOCKMEN'S SUPPLIES

DEWART with De-Wart-Em, veterinary wart remover. At your dealer or $1.00 postpaid. ONTARIO CHEMICAL COMPANY, Ontario, Oregon. 9-*

ARTIFICIAL breeding equipment. Largest, most complete line. Everything from insemination tubes to professional inseminator's kits. Inseminators and farmers write for new free 64-page breeders' catalog. NASCO, Fort Atkinson, Wisconsin. 7-*

HORN weights, 80c per pair postpaid. Made in 4 sizes ¼ lb., 1 lb., 1½ lb., and 2 lbs. Tattoo markers $4.75 postpaid. Includes set of numbers, bottle of ink, and full directions. We also carry complete line of ear tags, neck chains, veterinary instruments, supplies, serums, remedies; in fact, everything for the stockman. Write for free catalog. BREEDERS SUPPLY CO., Council Bluffs, Iowa. 18-*

STOCKMEN'S SUPPLIES

ARTIFICIAL insemination supplies and instruments. Technical information. Catalog on request. BREEDERS EQUIPMENT CO., Flourtown, Pennsylvania. 7-*

FREE—80 page Breeders' Catalog. Most complete farmers' catalog ever published. Write NASCO, Fort Atkinson, Wisconsin. 20-*

FARMS FOR SALE

100 ACRES first class soil near town—good buildings, 20 cows—new tractor, machinery, crops, $15,500. Other bargains. LOEFLER LAND COMPANY, Chippewa Falls, Wis.

GRADE A Dairy—164 acres 110 cult. Stock and equipped $51,000. 42x60 barn with stanchions, box stall and feed storage. Continuous flow milk parlor. 7-room modern home. 25 Jersey cows averaging 310 lbs. B.F. 8 heifers. Quota 17.09 B.F. per day. Artificial insemination membership included. KINGWELL AGENCY, 155 So. 2nd St., Corvallis, Oregon.

INQUIRIES invited on Virginia dairy and stock plantations. 100 to 5,000 acres. Riverfront or mountain. Restored and modernized colonial mansions. REGINALD WRIGHT, Driver, Va.

12 ACRES, excellent buildings. BROOKSIDE ACRES, Bellevue, Iowa.

WISCONSIN dairy farms. Some with all modern homes. Some equipped. Heavy soil district! $40 to $90 per acre. Terms. BAKER ZZ11, St. Croix Falls, Wisconsin. 17-2

VIRGINIA farms, estates, tourist camps, service stations, city property, free catalog. ELLIOTT E. BROOKS, Fredericksburg. 4-*

STROUT'S New Catalog. Farms, homes, country businesses. World's largest! 5029 outstanding bargains, 31 states. Mailed free! Save through STROUT, 7 So. Dearborn Street, Chicago 3, Illinois. 16-3

FARMS FOR RENT

FOR Rent—Large modern dairy farm in southern Wisconsin. Fully equipped with machinery and a large highly productive purebred Holstein herd. Only applicants with the proper qualifications and finances sufficient to purchase machinery and feed need apply. Reply to DOANE AGRICULTURAL SERVICE, INC., 63 S. LaSalle Street, Aurora, Illinois.

FARM EQUIPMENT

LIQUID manure pumps. We manufacture the Tillamook liquid manure pump and the flexible chain harrow. STEINBACH IRON WORKS, Tillamook, Oregon. 25-*

COW stalls, pens, steel windows, hay carriers, steel fence post, post pullers. Immediate shipments. STANDARD EQUIPMENT, INC., Bel Air, Maryland. 18-*

FREE barn plan book. Best ways to build or remodel your farm buildings. Send for details. LOUDEN, Dept. 3, Fairfield, Iowa. 1-*

BARN Equipment—Modernize your barn with Simplex stalls, stanchions, pens, water bowls, elec. ventilation, etc. Write for catalog. SIMPLEX BARN EQUIPMENT, Marshfield, Wisconsin, Dept. A. 14-*

USED steel cow stalls—like new—at half price. Stanchions, litter carriers, water bowls, steel columns. CONTINENTAL MFG. CO., 118 So. Second Street, La Crosse, Wisconsin. 17-2

PREVENT leg swelling and foot trouble in your herd by spreading a half inch Unicrete floor over your old concrete. Used for years in many dairy barns. Your own men can easily do the work. Send for circular and prices. UNION PRODUCTS COMPANY, Ft. of West 70th Street, Cleveland 2, Ohio. 12-apl

WELDING generators 150 amp. $47.50. Motors ¼ horse $15. ½ $22. 1 $30. Compressors $17.50. BUTLER, 1685 Milwaukee, Chicago 47.

GIGANTIC Sale Government Surplus. Rural telephones, washers, pumps, power plants, paint, sprayers, tools, miscellaneous. Bargain catalog free. BURDEN'S, Lincoln, Nebraska. 18-*

BARGAIN Close-out Sale — Brand new John Deere field harvester with motor and blower at substantial discount. Wire, write, phone. Will deliver. TIPTON TRACTOR & IMPLEMENT COMPANY, Tipton, Indiana.

NEW and used James stanchions, stall partitions, drinking cups. Bargain. DOANE AGRICULTURAL SERVICE, INC., Aurora, Illinois.

FEED BAGS

WE pay highest prices for your empty cotton and burlap feed bags. Write for our quotations. THE DAYTON BAG AND BURLAP COMPANY, Dayton, Ohio. 1-*

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RUHM'S PHOSPHATE rock pays you best. And it costs you less if you count the results. Ground finer by far than any other, it is quicker acting, achieves better distribution in the soil, so plants get more out of it—and so do you. Get the facts! Write for folder or name of nearest dealer. RUHM PHOSPHATE & CHEMICAL CO., 8 S. Michigan Ave., Chicago 3, Ill. 8-apl

GOLDEN-GLO Rock Phosphate, highest test, finely ground for direct application to the soil. Excellent plant food for all crops and pastures. Lowest unit cost. EATON-MANN PHOSPHATE COMPANY, 301 Barber Building, Joliet, Illinois. 18-4

SEEDS AND PLANTS

FOR Sale—Wisconsin Ladino Clover $1.48 lb. Certified Moore Barley $2.35 bu. Few agents wanted. LLOYD SCHULD, Jefferson, Wis.

SWINE

REGISTERED Berkshires. Sired by 3 State Fair Champions. Practically grade prices. ORLO ADAMS, Hartland, Wis. 24-*

GOOD healthy northern Wisconsin feeder pigs. On feed $12.50. CLARENCE ACKER, Middleton, Wisconsin. Phone 25096. 16-*

REGISTERED Minnesota number 1 lean meat type hogs. Litters 10 to 15. Immunized. HENSRICH FARMS, Lomira, Wisconsin. 17-3

DOGS

GENUINE English Shepherd and Collie Pups. Healthy and strong. Guaranteed heelers. Year's trial. Choice of sex. Spayed females a specialty. Priced right. CLOVERDALE KENNEL FARM, Ackley, Iowa. 18-*

SHEPHERDS, Collies, outstanding herders, watch dogs. ZIMMERMAN FARMS, Flanagan, Ill. 5-*

COLLIES—The kind that bring home the cows. Guaranteed to please you. Dept. H, SHOMONT KENNELS, Monticello, Iowa. 12-*

ENGLISH Shepherd puppies. Heelers, watchdogs, companions. D. W. YOHER, Nappanee, Indiana. 17-2

MY imported registered Border Collies are phenomenal workers, as anyone who has witnessed their performance will admit. Acquire pups from these imported matings. M. S. PERROT, R.4, Gentleman Road, Ottawa, Illinois.

WORKING Border Collies. Puppies from imported parents. We have the best. McCLAIN FARMS, R.6, Lima, Ohio. 18-3

RABBITS

EARN up to $400 monthly—raise Angora rabbits! Experience unnecessary. Wool brings $5 pound. Plenty markets. Folder free. WHITE'S RABBITRY, Newark 30, Ohio. 15-*

POULTRY—BABY CHICKS—DUCKS

TENDERIZE, flavorize with most popular capon pellets now $3-100, $14-500. Implanter $1.75 postpaid. SINE'S HATCHERY, DA6, Quakertown, Pennsylvania. 16-4

POSITIONS WANTED

HERDSMAN 34 years old, married, small family. Available October 1. Phone Grant 4574 or write CHESTER TAYLOR, Route 4, Fremont, Ohio.

HERDSMAN or farm manager, life-time experience with all makes of machinery and milkers. Married, no children. BOX 582, care Hoard's Dairyman, Fort Atkinson, Wisconsin.

WORKING herdsman, married, 25 years old. Holsteins preferred. Lifetime experience, all phases farm operation. Graham graduate. No smoker or drinker. Available December 1st due to herd dispersal. Best of references. BOX 587, care Hoard's Dairyman, Fort Atkinson, Wisconsin.

FARM manager or herdsman, university graduate in dairy husbandry. Experienced with Holsteins, Ayrshires. Single, sober, 29 years. Do collection and artificial insemination, most veterinary work, test-cow, fitting, show. Know latest field methods. Available immediately. State set-up completely first reply. BOX 586, care Hoard's Dairyman, Fort Atkinson, Wis.

MARRIED man early 30's wants work on dairy farm. Prefer work with Guernseys as I have had work with them for 15 years. Prefer southern Wisconsin. BOX 584, care Hoard's Dairyman, Fort Atkinson, Wisconsin.

GOOD competent herdsman and farmer with own help seeks job with a future. Write BOX 585, care Hoard's Dairyman, Fort Atkinson, Wis.

HELP WANTED

EXPERIENCED test cow man to machine milk test string three times a day. Good salary. Modern furnished apartment for man and wife. Also man wanted to milk two time string and board one man. Good salary. Modern furnished house and utilities. HARMONY JERSEY FARMS, John Street, Greenwich, Connecticut. 15-*

DAIRYMAN—Single or married, to milk test cows two and three times daily. High producing top quality cows. Chicago territory. Write BOX 576, care Hoard's Dairyman, Fort Atkinson, Wisconsin. 17-*

FAMILY man to operate small dairy farm near Twin Cities. Give qualifications, experience, references. BOX 575, care Hoard's Dairyman, Fort Atkinson, Wisconsin. 17-2

WANTED—Married man with ability to take full charge of established Guernsey herd of high production. Farm of 205 acres, employ three. WALTER H. BALL, Huntington, Ind. 18-2

HERDSMAN—Fifty registered Ayrshires. Everything modern. Advise full particulars for prompt offer. GREENBANK FARM, Hopewell, Virginia.

EXPERIENCED Dairy Hands to work on large Certified Milk Farm. Wages $56.96 to $48.00 per 48 hour week. Pay for overtime. Room and board $1.85 per day. Opportunities for dependable men. Write for information. WALKER-GORDON LABORATORY COMPANY, Plainsboro, New Jersey. 18-apl

EXPERIENCED gardener for suburban estate near Albuquerque, New Mexico. Flowers, greenhouse and vegetables. Modern house furnished and suitable pay. ALBERT G. SIMMS, Box 1549, Albuquerque, New Mexico.

YOUNG married dairy farmer wanted to run 160 acre farm near Beloit, Wisconsin. 28 P. B. Holsteins, new Surge milking parlor. Farm fully mechanized. 7 room house fully furnished including furniture, dishes, bedding, new bath, etc., and all modern electric appliances in. Want young man must have good references and must want to be permanently a dairyman. Pay prevailing rate and bonus. Write fully all details about yourself to BOX 584, care Hoard's Dairyman, Fort Atkinson, Wisconsin.

HELP WANTED

HERDSMAN Wanted—For expanding milking herd of 100 Holsteins. Pabst and Dunloggin breeding. Must be skilled in feeding and care of dairy cattle; ability to inseminate artificially desirable. Will consider only man with thorough qualifications and best of recommendations. Write full details and expected salary. Will also consider man presently employed as assistant herdsman if properly qualified. Am interested in production, not in showing. W. M. BOLLENBACH, 2504 Long Avenue, St. Paul 4, Minnesota.

SINGLE man to work with 500# dairy herd and help with field crops — in northern Indiana. BOX 568, care Hoard's Dairyman, Fort Atkinson, Wisconsin.

HELP Wanted—Male, experienced, single, dairy or poultry. Excellent working and living conditions. Steady year-round work. LARRO RESEARCH FARM, 20521—10½ Mile Road, Detroit 19, Michigan. 17-*

HERDSMAN, also general farmers. 150 Brown Swiss. Strictly modern farm. Experiences, references satisfactory. Write for interview at your home. Contract considered. LAUREL RIDGE, Litchfield, Connecticut.

AGENTS WANTED

HAPPY money-making days for you! Sell friends metallic Christmas cards, wrappings, children's books, gifts, novelties. Big profits. Bonus, special offers. Request feature samples on approval, free samples name imprinted Christmas cards, stationery, napkins, free catalog and free selling guide. NEW ENGLAND ART PUBLISHERS, North Abington 257, Massachusetts.

HAVE a limited number of territories still available for aggressive agents. Complete line of high quality barn equipment including electric ventilation, barn gutter cleaners at competitive prices. Earn $5,000 and more per year in your spare time. Write BOX 555, care Hoard's Dairyman, Fort Atkinson, Wisconsin. 16-5

AT last! Something new and sensational! In Christmas cards. Show gorgeous satins, velours and metallics never before offered. Gets easy orders fast! Pays up to 100% cash profit. Free samples of 50 Christmas cards with name. 50 for $1.00 up. 80 assortments. Personalized book matches and stationery, gift items. Two assortments on approval. Write PUHO CO., 3801 Locust, Dept. 092-L, St. Louis, Missouri. 17-2

FILM SERVICE

SPECIAL! 12 photo Christmas cards made from your favorite snapshot negative only 89c! Eight giant (enlarged) prints from your roll or negatives 35c—12 or 16, 50c. Quick service! Premiums, coupons! Free mailers! WILLARD STUDIOS, Box 3536W, Cleveland, Ohio. 17-6

MISCELLANEOUS

MAKE up to $35-$45 week as a Trained Practical Nurse. Learn quickly at home. Booklet free. CHICAGO SCHOOL OF NURSING, Dept. F-9, Chicago, Illinois. 13-6

QUILT Pieces—Big bundle, about 8 yards, bright new fast-color cotton prints. Patterns free gift. $1.00. McCOMBS BROTHERS, 4519 Butler, Pittsburgh 1, Pennsylvania. 18-*

A $100-A-MONTH hobby at home! No soliciting, no mail order, no meeting people. Easy, enjoyable pastime. Details 25c. (Refundable.) LAURA DICKSON, 1006-HD Elizabeth St., Anderson, S. C.

DIRECT shippers, choice qualities baled hay, alfalfa meal and dairy and livestock feeds. Grains. SCHWAB BROS. MILLS, INC., New Bavaria, Ohio. 16-*

RUPTURED? Positive comfort, no understrap, no steel, no elastic. Write SMITH MANUFACTURING CO., Preston, Ontario. 15-6

NEED stationery? You will like our livestock illustrations. We will print your order with your own breed on it. Write for stationery circular. HOARD'S DAIRYMAN, Fort Atkinson, Wisconsin. 20-*

PARTS for all stoves, ranges, heaters, furnaces back to 1886. Fit guaranteed. Write for prices. Give make, model and part number. BLUE BELLE CO., Dept. Y 1307 Howard, Omaha, Nebraska. 6-apl

JUST out! Get largest auto accessory and parts catalog in world. Over 15,000 items, including Hollywood accessories, hi-speed equipment, rebuilt engines; all parts and accessories for all cars, trucks. New, used, rebuilt! We have that hard to get part! Completely illustrated. Jam-packed with bargains. Send 25c. J. C. WHITNEY COMPANY, 1919-AX Archer Avenue, Chicago 16.

AMMUNITION. American-foreign and shotshells. New guns. Dime for list. CENTRAL SPORTS, Delphos 20, Ohio. 18-4

BODY socks 18 inches high, red or green top. Direct mail order offer one pair 79c, six pairs $4.50. DONAL HURLEY, Little Falls, New York. 18-2

CONTEST Books — Book of 3,000 pictures, grouped by subjects $5. Picture Encyclopedia 24,000 pictures, grouped $25. Word lists 3 or 4 of 5 or 6 of 7 letters each $2. Word lists 8 or 9 or 10 letters each $4. RESEARCH BOOK CO., 30 Church St., New York 7, New York. Return for refund in 5 days if not satisfied.

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is worth money to you. Have the story of your herd with you at sales and meetings. Price $3.00.

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Wisconsin CORN HYBRIDS

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Bred especially for Wisconsin by the State Agricultural Experiment Station . . . grown on more Wisconsin acres than any other hybrids. Order from your Wisconsin Certified Seed Producer or Dealer, NOW!

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For clean, fast, light hair removal about head, ears, etc. Quiet running, easy handling. For 110v, 60 cycle AC. Underwriter's Laboratories tested. $15.00

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Address........
City........ State........

New Milk Record for Brown Swiss

New national milk producer for the Brown Swiss breed is Blue's Beauty R.'s Babe, seven-year-old cow owned by J. Franklin Michels, Ohio. Her record of 30,465.5 lbs. milk in 365 days on 3X topped the previous high milk record made in 1937 by the famous Illini Nellie at the University of Illinois. Our readers will remember that the 1,200-pound fat record, held by Illini Nellie for several years, was topped last fall by two other Brown Swiss cows, Royal's Rapture of Lee's Hill and Clepe's Best M. B. Since that time, Royal's Gina of Lee's Hill has also topped "Nellie's" record.

By producing 1,049.67 lbs. fat in the same lactation, Blue's Beauty R.'s Babe becomes the 30th cow in the Brown Swiss breed to top 1,000 lbs. fat.

A consistent producer all of her life, "Babe" produced 19,365 lbs. milk and 678 lbs. fat as a four-year-old; 25,532 lbs. milk and 911 lbs. fat as a five-year-old. Including her latest record, she has a total of 75,363 lbs. milk and 2,638 lbs. fat in three consecutive lactations.

It is interesting to note that "Babe" was on the show circuit seven weeks during the lactation in which the new record was made, being grand champion female at the 1949 Kentucky State Fair, also a member of the first prize dairy herd at Kentucky, Indiana, and Ohio in 1949. Except for the time on the show circuit, her record was made standing in the stanchion along with the rest of the herd.

The dam of "Babe" is still in Mr. Michels' herd at twelve years and has a record as a six-year-old of 21,066 lbs. milk and 812 lbs. fat. The maternal granddam, Belle's Blue, also is still living and is sixteen years old.

Dates Are Important

Members who write down breeding dates on cows and heifers know when to expect them or how many times a cow was bred. Too many try to keep it all in their heads. Then old Bossy drops a calf while still milking and starts a poor record or she is 3 or 4 months dry instead of 6 to 8 weeks. Members who do keep track, get good returns for the few minutes it takes to write down these dates.—G. R. Reiter, Butler, Iowa, DHIA.

Tip to motorists: Your safety is largely in your hands—so why not make your steering wheel a life preserver.

Sale Announcements

Sept. 27 — Guernseys. Glyden Farm Guernsey Dispersal at Brandon, Wis., Phillips Sale and Pedigree Service, Sale Manager, Waukesha, Wis.

Sept. 28—Holsteins. Dispersal of the R. M. Hadrath herd at Stillwater, Minn. Baird and Darcey Sale Mgrs., Waukesha and Watertown, Wis.

Oct. 2—Guernseys. Scanlon Dispersal, Iowa City, Iowa. Louis McL. Merryman and Sons, Inc., Sales Mgrs., Sparks, Md.

Oct. 6—Guernseys. Boulder Bridge Dispersal, Excelsior, Minn. Louis McL. Merryman and Sons, Inc., Sparks, Maryland, Sales Managers.

Oct. 7—Ayrshires. New York Production Sale at Cobleskill, N. Y. Ayrshire Sale Service, Sale Mgrs., Brandon, Vt.

Oct. 7 — Guernseys. Wey Acres Sale, Thiensville, Wis. Louis McL. Merryman and Sons, Inc., Sparks, Maryland, Sales Managers.

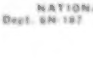
Oct. 7—Guernseys. Wey Acres Reduction Sale, at Thiensville, Wis. Louis McL. Merryman & Sons, Inc., Sales Mgr., Sparks, Md.

Oct. 7—Holsteins: Holstein Sale at Clyman Farms, Watertown, Wis. Baird & Darcey, Sale Managers, Waukesha and Watertown, Wis.

Oct. 9 — Guernseys. Wisconsin State Guernsey sale at Waukesha, Wis. Wisconsin Guernsey Breeders Ass'n. Sale Mgrs., Waukesha, Wis.

Oct. 9—Ayrshires. Dispersal of the Frank Winkler herd at Middleburg, N. Y. Ayrshire Sale Service, Sales Mgr., Brandon, Vermont.

NECK CHAIN TAGS



Heavy brass—2⅝" x 2⅛". Black ⅝" numbers, both sides. Best quality. Complete Cow Set: Tag, 40" Chain & Attachment Link—$1.50 each. Complete Calf Set: Tag, 30" Chain & Attachment Link—$1.25 each. Priced f.o.b. Newport, Ky. Write for free circular—ear tags, hog rings, etc.

NATIONAL BAND & TAG COMPANY
Dept. SN-187 Newport, Ky.

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World's largest producers of 4% milk. Cows weigh 1500 lbs. and up. Long milking lifetime. High salvage value. Free literature and breeders lists.

BROWN SWISS ASS'N., Beloit, Wis.

BROWN SWISS AUCTION SALES

SANDWICH SWISS SALE
Sandwich, Illinois, Fairgrounds
MONDAY, SEPTEMBER 11
11:30 A. M. Under Cover
50 Registered Brown Swiss
Consigned by Good Illinois Breeders

D. D. & D. H. PERRY DISPERSAL
At the Farm, 1 Mile North and 2½ Miles East of
LAKEVILLE, INDIANA
SATURDAY, SEPTEMBER 30
40 Reg. Swiss — 1:30 P. M.
Machinery, Feed, Etc., 10 A. M.

GEORGE W. RODGERS DISPERSAL
MONDAY, OCTOBER 9
Wells Sale Barn
FREMONT, NEBRASKA
46 REGISTERED BROWN SWISS
ONE OF THE FINEST HERDS in the western area
PRODUCTION plus TYPE

THE IMPERIAL SALE
A NATIONAL SALE
60 TOPS of the BREED from TOP BREEDERS of TEN STATES
FRIDAY, NOV. 10, 11 A. M.
ST. CHARLES, ILLINOIS

For catalogs of the above sales Write To
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BROWN SWISS SALES SERVICE
LAKE MILLS, WISCONSIN

Write Norman Slade, White Bear Lake, Minnesota for Catalog of the MINNESOTA STATE ASSOCIATION SALE to be held OCTOBER 11th at State Fair Grounds, ST. PAUL, Minnesota. Fifty females, five bulls. Out of state buyers welcome.

FOR SALE Registered Brown Swiss Bull Calves. 1 mo. to service age. Exceptionally fine animals from Colonel Harry and Lee's Hill lines. Dams classified good plus and very good. Priced low to dairymen from $50.00 up. Inquire;
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Your Jersey heifers calve and begin producing from 3 to 6 months sooner than other dairy breeds. That means quicker milk checks, faster herd-building.
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Sybil Owl Zenobia 1423953—Very Good
Ton of Gold Winner—2,608 lbs. fat. Her first four records—539, 562, 641 and 893 lbs. fat. All on twice daily milking.
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ALL AGES
Two favorable heifer crops have our barns too full. This is your golden opportunity. All prices are for quick sale.
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READBOURNE JERSEYS
Offer another top BULL CALF tattoo R061. Born March 9, 1950. Broken color, straight Island breeding top and bottom. He is sired by one of our Junior herd sires, Dreaming Crown Prince, a grandson of Browny's Designer. We have 24 beautiful daughters of this young sire. Calf's dam is a Very Good daughter of Rozel Crowning Lad, he by Crowning Effort. Her records: 7266-5.8-423-305-2X 8065-5.9-472-299-2X on test again and going at a Gold Medal Clip.
For pedigree and price write:
READBOURNE FARM, Centreville, Maryland

JERSEY BREEDING STOCK
Choice Pedigreed Jerseys by proven sires and out of cows classified for type and good production records. Reasonable prices. Write for pedigrees. HARMONY JERSEY FARMS, Gustave Schirmer, Owner, John Street, Greenwich, Connecticut.

SERVICE AGE
Jersey Bulls and bull calves, by Excellent proven Sires out of tested, classified dams, good production, type and longevity. Prices Reasonable.
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411 W. Town Street Columbus 8, Ohio

BRYN MAWR FARM OFFERS
Advancer Wonderful Owl, dropped Jan. 13, 1950, a Three Star son of the Proven Sire, Advancer Whirlaway (a son of Wonderful Advancer). Dam a tested and classified daughter of the tested sire, Fairview Torono Owl. Second dam over 6,000 lbs. fat. Write for pedigree and price. FRANK B. ASTROTH, R. 1, South St. Paul, Minnesota.

Champion Production Jerseys
Gold Star Herd. Winning in succession Highest Production Awards State of Georgia over all breeds. Choice bulls and heifers from cows 9,000 to 12,000 lbs. milk, 400 to 700 lbs. fat. Milked Twice Daily. HARRIS PEDIGREE FARM, Box HD, Pelham, Georgia.

DAIRY COWS, HEIFERS
100 Jersey and Guernsey Springer Cows. All TB-abortion tested. Special attention to order buying. W. L. RUSH, Springfield, Mo. Phone 906, Night Phone 151, Rogersville, Mo.

BARGAINS in registered Jersey bulls and bull calves. Best blood lines. Biltmore and Imported breeding. Prices right. Satisfaction always guaranteed. Send for free list. ENNIS STOCK AND DAIRY FARM, Festus, Mo.

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Increase your production by using a son of Brampton W. R. Lord Clair, our present Herd Sire. His Sire: Brampton World's Records "V. G.", Superior Medal of Merit, Gold and Silver Medal, Tested Sire. His Dam: Brampton Lord's Clariel "V. G." 928 lbs. B.F., 19,175 lbs. milk in 365 days 2X. Bug from Iowa's highest Gold Star Herd.

PLEASANT VIEW JERSEY FARM
Crawfordsville Iowa

PIXY FARM offers

Baby Bull Calves by **Pixy's President.** His dam is Excellent. His 3 nearest dams' actual records ave. 970 lbs. fat. These calves are from first-calf heifers in a herd that is averaging over 500 lbs. fat 2x.
CHAS. S. KELLY-DAVID KELLY, Hudson, Wis.

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Come to Barron County for good productive, healthy, commercial dairy cows and foundation pure breds. Our county associations cooperate to render sales service to buyers. Write **BARRON CO. COOP. DAIRY CATTLE SALES ASS'N, BARRON, WIS.**

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Large feed capacity enables Holsteins to utilize large amounts of home-grown feeds to maintain top production. They have the capacity for greater Vitamin D intake and convert carotene into more true Vitamin A than do the smaller breeds.

There's a FUTURE with HOLSTEINS

HOLSTEIN-FRIESIAN ASS'N OF AMERICA • Brattleboro, Vermont •

CARNATION HEILO QUEEN PONTIAC
On 3-Time Milking As a 5 Year Old She Has Produced 806.4 Lbs. Fat, 21,067 Lbs. Milk

We Offer a Son of Carnation-O-Boy From This High Quality Young Daughter of Carnation Governor Imperial

CARNATION-O-BOY, born in 1948, is a Carnation herd sire by Hailrose Progressor and out of the famous 1107 lb. 4% testing daughter of Governor of Carnation, Carnation Homestead Inka Walker. His 6 nearest tested dams average 999.76 lbs. of fat in a year.

This week we offer a son of Carnation-O-Boy from the young cow pictured above, a cow with 5 All-American paternal sisters and brothers and a 3-times All-American sire. This cow is from a 980 lb. daughter of North Star Joe Homestead, 18 years old and still a valued member of the Carnation herd.

The bull offered is Ear Tag 8793, born June 29, 1950.

We recommend you write us at once for his extended pedigree.

Carnation Milk Farms

Address: **CARNATION MILK FARMS, 153b Stuart Building, Seattle 1, Washington**

HOLSTEIN and GUERNSEY

Choice selected Grade Springer Cows and Heifers. Large supplies always available. Recently Negative to T.B. and State Laboratory Bang's test. Truck lots or carloads. Quotations on request. We do not handle any young calves.

"Private Daily Sales"

L. F. BROWN & COMPANY

3140-57 Spring Grove Ave., Cincinnati 25, Ohio
Phones Kirby 5041-5042 Established 1840
Ohio's Largest Licensed & Bonded Distributors

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2 TOP NOTCH BULL CALVES 2

Born in February 1949. Both by Pabst Embel Wayne, 4% proven sire, whose A.R. daughters are making exceptional records and testing from 3.7 to 4.1%. No. 1 Dam, Lashbrook Leah Ormsby (V.G.), 557 lbs. fat in 305 days, 3.7%. Nine nearest dams ave. 4% test. No. 2 Dam, Lashbrook Patricia Ormsby, 452 lbs. fat, 305 days, 3.7% test. Both extra good individuals, priced $500 and $300 respectively. Send for pedigrees and photos.
A. J. LASHBROOK Northfield, Minnesota
(Accredited and Certified Herd)

YOUR FUTURE HERD SIRE?

Twelvelms Man-O-War Inka Segis—born Jan. 11, '50. 90% black with splendid type. Six nearest tested dams ave. 550 lbs. fat. Sire, Man-O-War Woodmaster with a long record of show winnings has sired many good sons and daughters. The dam has 3 AR records ave. 500 lbs. fat, 3.8% test. She was 1st 3-yr.-old at Iowa and 3rd at Waterloo 1947. Classified "Very Good." Calf should be seen to be appreciated. We invite your inspection. Write us for photograph, pedigree and price.
MEDSKER FARMS Sullivan, Indiana

HOLSTEIN SALE

SATURDAY, OCTOBER 7

at **CLYMAN FARMS, WATERTOWN, WIS.**
75 HEAD of selected Registered and Grade Holstein cows, heifers and yearling bulls. We aim to sell animals that will satisfy the most discriminating buyer.
BAIRD & DARCEY, Mgrs.,
Waukesha and Watertown, Wisconsin

COMPLETE DISPERSAL

of the **R. M. Hodroth herd of Registered and Grade Holsteins. 64 head. Thursday, Sept. 28,** 4 miles northwest of **Stillwater, Minn.** Herd fat ave. in 1949 was 387 lbs. Individual records up to 512 lbs. of fat. Entire herd is calfhood vaccinated. A very complete line of machinery to be sold starting at 10 A. M. Financing available. All animals TB and Blood tested.

BAIRD & DARCEY, Mgrs.
Waukesha and Watertown, Wis.

HOLSTEIN CATTLE

Purebreds and grades, many of Pabst, Carnation or Rag Apple blood lines. Selected from the best herds in the state of Wisconsin where better **purebred sires have been used for over 30 years. We cover fifteen of the leading dairy** counties in Wisconsin.

Services - W. L. Baird - Arthur Bennett - Harvey Swartz - Ed Weyker - Frank Swartz - Don Stouffer at your disposition—can handle orders for truck or carloads. Telephone 3644, Waukesha, Wis., or write for information to

INTER-COUNTY DAIRY CATTLE ASSOCIATION
Waukesha, Wis.

Choice Holsteins For Sale

Come to the Fox River Valley for good Holstein cattle, either grade or purebreds. We have eight counties in which to select from in the heart of America's Dairyland. Fieldman service.

FOX RIVER VALLEY
HOLSTEIN-FRIESIAN ASSOCIATION
Math Maulemans, Fieldman, Kaukauna, Wis.

---

90 Head of Dairy Cows

HOLSTEINS, GUERNSEYS and HEIFERS

for your selection on hand at all times. Come to Dodge County, Wisconsin, 50 miles northwest of Milwaukee, where heavy producing Holstein cows are raised from foundation purebreds. Priced to meet your demands, one or a carload. We have transportation for delivery to your farm.

Write or Phone

BEN W. NEHLS, Route 3, Juneau, Wisconsin

HOLSTEIN COWS and HEIFERS

Registered and Grades from high producing herds. Sired by and bred to bulls of the best cow families, many artificially.

COLUMBIA COUNTY HOLSTEIN BREEDERS ASSOCIATION
Arthur H. Weiner, Secretary-Fieldman, Columbus, Wisconsin

WISCONSIN DEPARTMENT OF PUBLIC WELFARE

With the best of foundation stock and over 25 years of Burke and Ormsby linebreeding, with complete herd production records kept in every herd, and combining production and type by careful selection in our breeding program, we have been able to obtain outstanding results. We invite you to visit our herds. If interested in a good young sire, write for our bull list.

W. W. KINYON, Farm Supervisor
STATE DEPT. OF PUBLIC WELFARE—
STATE CAPITOL
Madison, Wisconsin

GOOD HOLSTEINS FOR SALE

Cows . . . Heifers . . . Serviceable Bulls
For good Holsteins, either registered or grades—one or a carload—come to Jefferson County, Wis. Let us quote you prices on quality cattle from healthy herds. Free fieldman's service.
JEFFERSON CO. HOLSTEIN BREEDERS' ASS'N
Fort Atkinson Wisconsin

BARRON COUNTY, WIS.

"Where Quality Holsteins Are Bred"

Our co-operative sales service can fill your needs for better Holsteins from one of the outstanding dairy centers of the nation.

BARRON COUNTY HOLSTEIN BREEDERS ASSOCIATION, Box 474 Barron, Wis.

DANE COUNTY HOLSTEIN BREEDERS ASSOCIATION

Offers special sales service on **grade and purebred cattle** from one of Wisconsin's largest dairy counties where over 10,000 cattle are on DHIA test and more than 15,000 are bred artificially.

For information write
FRANK E. CAIRNS, Fieldman
353 W. Johnson St., Madison, Wisconsin
Office phone Dial 6-8613 Residence Dial 3-5536

PINEHURST FARM DISPERSAL

WEDNESDAY, OCT. 18, 1950

at the farm, located on Hwy. 42, ½ mile south of

Sheboygan Falls, Wis.

100 REGISTERED HOLSTEINS

Selling are—

- 14 daughters of Lake Park King Cornflower Rag Apple
- 12 daughters of Pinehurst Pontiac Imperial
- 11 daughters of Newmont General
- 9 daughters of Lake Park Sir Retta Della Ormsby
- 7 daughters of Newmont Ideal Lad

And featuring—

PABST PILOT

born: March 22, 1949
sire: Pabst Roamer, "Excellent & Gold Medal"
dam: Fremey Lottie King, "Excellent"
365d 6¼y 3X 27011 3.7% 1000.5
She is the famous "Lottie" cow of Pabst-Knutson

Pabst Pilot is the highest record son of "Roamer" His ¾ sister, by "Burke" and from "Lottie" is the highest record daughter of "Burke" with 945 lbs. He is a full brother to Pabst Rambler, whose daughters in the Pabst herd have 2-yr.-old records to 789 lbs.

BAIRD & DARCEY, Waukesha & Watertown, Wis.

Having trouble settling your cows?

Try a young bull. When you try a young bull, be sure to try one from Foothills Holstein Farm. Bulls for sale or lease.
FOOTHILLS HOLSTEIN FARM, Papillion, Nebr.

Rawleigh Revelation Premier

born March 11, 1950. Splendid type. About 50% black.

Sire: Carnation Heilo Revelation, whose six nearest tested dams average Fat 1,042, Milk 25,380, test 4%.

Dam is a first-calf daughter of Crown Imperial Inka Premier, whose six nearest tested dams ave. Fat 986 lbs., Milk 23,045.

An excellent prospect at a very moderate price. It will pay you to write today for full particulars.

THE W. T. RAWLEIGH COMPANY
Freeport, Illinois

---

6 OUTSTANDING REGISTERED HOLSTEIN HEIFERS

due to calve from September to November. "Rag Apple" breeding, from dams with 500 lbs. of butterfat testing 4%. Also a few Registered Heifer calves out of good dams.
PLUM GROVE FARMS, PALATINE, ILL.
PHONE: PALATINE 21J1

QUALITY BULLS Bred to a Plan

Our herd is being bred along lines we started nearly 30 yrs. ago. Herd in DHIA work for still longer. All this has given us a herd of even production and uniform type. One calf ready for service sired by our Black Beauty bull. A few younger sired by our Carnation Majestic. Have used 6 Carnation bulls since 1933. Tell us age you want.

EUREKA FARMS
C. E. HURLBERT Stockton, Ill.

Buy from HOARD'S DAIRYMAN advertisers . . . They are reliable.

DISPERSAL

LOWRIDGE DAIRY FARM PUREBRED HOLSTEIN HERD
(Owner—Leslie H. Geddes)

65 REGISTERED HOLSTEIN CATTLE

SATURDAY—OCTOBER 14—At the Farm—Winnebago, Ill. Directions: 6 Miles West of Rockford, Ill., on U. S. Hy. 20—then turn South ½ Mile Past Winnebago.

Sale Headquarters: Faust Hotel, Rockford, Ill.

SALE STARTS AT 11 A. M.

The herd on its first classification scored 2 Excellents—8 Very Good—17 Good Plus—4 Good—Average score 83.2.

Herd test last year averaged, 3X milking, 458 lbs. Fat—3.91% test.

Many of the animals are 2-yr.-olds, with records over 500 lbs. Fat in 2-yr.-old form.

Offerings Include: The famous Produce of Dam, composed of two full sisters, Transmitter bred—having won the first prize in 3 and 4-yr.-old form at the Illinois State Fair—Grand Champion at the Illinois State Black & White Show; also, the first prize Illinois heifer calf, and many other prize winners.

There will be 25 daughters of Glenafton Rag Apple Marksman—a son of "Marksman," from Glenafton Alice Segis, with 622 lbs. Fat as a 2-yr.-old, with a 4.12% test.

There will also be calves—yearling heifers—cows—bred heifers—and a number of very choice young bulls.

Calfhood vaccination has been practiced for many years. This herd has been built up over a number of years through the careful selection and judgment of Ross Logan and L. H. Geddes.

If Looking for Quality, Do Not Miss this Sale. There is Not a Poor or Fair Animal in the Herd.

(To Insure Catalog in Advance of Sale, Send 25c)

For Information Write
BAIRD & DARCEY, Waukesha or Watertown, Wis.

REGISTERED HEIFERS FOR SALE

We have some excellent heifers and heifer calves for sale. Dictator and King Bessie breeding. Good individuals from good producing dams. Write or come to the farm.
HAWTHORN FARMS, Libertyville, Illinois

THE BUSINESS END of a GOOD BUSINESS

The udder of
LADY JULIANA BESSIE
Made 100 lbs. Butterfat in April
Granddaughter of JULE KING FOBES.

Her March calf, **Basil,** is a beauty, sired by **Prince,** (see our July 10th Hoard's ad), son of the **Excellent Gold Medal** SENSATION MARATHON LAD, out of a 580 lb., 2x, **Very Good** daughter of the **Gold Medal** NEWMOND TRIXY ORMSBY PRINCE.

Write us about BASIL.

SCOTT MEYER & SONS, Hannibal, Mo.

MISSOURI STATE HOLSTEIN SALE

OCTOBER 2, 1950

66 — REGISTERED HOLSTEINS — 66

23 COWS — (8 officially classified Very Good) — All production tested except one and she speaks for herself.

23 BRED HEIFERS — All from production tested dams.

16 OPEN HEIFERS — All from production tested dams.

4 BULLS — (All from Very Good and Excellent dams, with records of 600 lbs. fat or better).

SALE TO BE HELD AT . . .

OZARK EMPIRE FAIR GROUNDS

SPRINGFIELD, MISSOURI

OCTOBER 2, 1950.......12:30 P. M., CST

For Further Information and Catalogues Write to J. E. CROSBY, JR., Secy., Missouri Holstein-Friesian Association, 113 Waters Hall, Columbia, Missouri.

Pabst Regal "Excellent" Gold Medal Proven Sire

SONS OF PROVEN SIRES AVAILABLE

Wisconsin Admiral Burke Lad's (V.G.) transmission of high production is inherited by his sons, Pabst Roamer (Ex.) and Pabst Regal (Ex.), as shown by these averages of their daughters—Burke's 84 daughters average: at 2 yrs. 4 mos. 17,094 m. 3.67% 625.2 f. 3X. Pabst Roamer's 40 daughters ave.: at 2 yrs. 4 mos. 17,939 m. 3.7% 661.9 f. 3X. Pabst Regal's 14 daughters ave.: at 2 yrs. 3 mos. 17,986 m. 3.77% 676.7 f. 3X.
Young bulls carrying Burke breeding are available to head your herd. Semen also available. Write for terms.

PABST FARMS, Inc. Acc. & Neg. Oconomowoc, Wis.

AYRSHIRES
MOST PROFITABLE COWS

4% MILK

Big Milkers - Hardy Rustlers
Good Grazers - Perfect Udders

Write for Booklets
Ayrshire Breeders' Association
10 Center St., Brandon, Vt.

IMPROVE YOUR DAIRY HERD

Three of our best registered Ayrshires are calving soon. Take a bull calf, use him until 3 years old free. CLARENCE CORKWELL & PAYNE, Mt. Sterling, Ohio.

AYRSHIRE AUCTION

NEW YORK PRODUCTION SALE—Sat., Oct. 7th at 12:00 Noon. Fair Grounds, Cobleskill, N. Y.

60 HEAD—19 Cows (their records ave. 11,010 M 459 F. 8 1st Calf Heifers, dams rec. ave. 10,927 M 473 F. 16 Bred Heifers, dams rec. ave. 11,181 M 473 F. 20 Heifer Calves, dams rec. ave. 11,753 M 502 F. 6 Bulls, dams rec. ave. 13,750 M 584 F. (All M.E. 2x 305-day.) Every individual selected. Every one production-bred. 41 by Approved sires. Majority of Cows and Bred Heifers fresh or due within 60 days. 47 from Accr'd. herds. 63 Calfhood Vaccinated. All T.B. and Blood Tested and inoculated against shipping fever within 30 days prior to sale.

—FOR CATALOG WRITE—
Ayrshire Sales Service - Box 152 Brandon, Vt.

AYRSHIRE DISPERSAL

Frank Winkler Dispersal, Middleburg, N. Y., Mon., Oct. 9, at 12:30 P. M. (near Cobleskill). A superior farmer-bred herd of 40 Cows and First-Calf Heifers; 11 Bred Heifers; 12 Open Heifers; 3 Approved Sire and 3 other Bulls. 1950 H.T. ave. 11,184 M. 4.1% 459F. All home-raised; herd negative, all vaccinated, tested within 30 days.

FOR CATALOG WRITE
Ayrshire Sales Service, Box 152, Brandon, Vt.

FREE for the ASKING!

Fine AYRSHIRE Selected
PEDIGREE BULL CALVES

Sired by Scottish Imported Preferred Pedigree Logan Mains Gaiety. Fine opportunity for owners of grade herds and Farm Youths. (No Gaiety Progeny for Sale!) For details write:
EZRA STONE, Stone Meadows Farm, Newtown, Pa.

AYRSHIRE BULL CALVES

Bred for type, production, quality. Sired by top ranking double approved sires.
REIDINA FARMS Newtown, Penn.

AYRSHIRE BULL CALF

Born July 21. Sire's dams ave. 10,818 lbs. milk and 434 lbs. fat, 2x, 305-day (M.E.) Dam imported from Scotland, made 10,041 lbs. milk and 394 lbs. fat at 3 yrs. 3 mos. in 305 days, 2x. Pedigree and price on request. STRATHGLASS FARM, Box 71, Port Chester, New York.

60 AYRSHIRES

Cows, Bred Heifers, Calves, Bulls
MINNESOTA STATE SALE
NEW ULM, MINNESOTA, OCTOBER 14
FOR CATALOG WRITE
WALTER KLAUS, Secretary, Minnesota Ayrshire Breeders' Association, Farmington, Minnesota

FRANK LUHRS DAIRY COW MARKET

We have a large selection of high-producing Northern cows on hand.
SOUTH ST. PAUL, MINN. La Salle 1456

REGISTERED AYRSHIRE BULLS

1 to 14 mos. old. Sired by my Grand Champion bull and out of A.R.(?) dams. Write: GREENFIELD FARMS, 3300 South 76th Street, West Allis, Wis.

Write
CHIPPEWA CO. DAIRY CATTLE BREEDERS ASSN.
Chippewa Falls, Wis.

Ayrshire Bull Calves

Bred for Type, Production, Test, Disposition and Longevity by Preferred Pedigreed bulls; from tested and typed dams. Let your next herd sire come from Carefree; let him convince you.
CAREFREE FARMS
Traditionally The Best
New Haven Indiana

AYRSHIRE BULL CALVES
FUTURE HERD SIRES

by Double Approved Sires; from tested and classified dams
HOOSIERLEA FARMS
Franklin, Indiana

FREE GUERNSEY INFORMATION KIT

Facts, figures, market data—tips on breeding, buying, selling, dairying. Remember, Guernsey Cattle and premium-priced GOLDEN GUERNSEY Milk can better your income. Write for FREE Kit today.
THE AMERICAN GUERNSEY CATTLE CLUB
512 Grove St., Peterborough, N. H.

REAL HERD IMPROVER

ROCKINGHAM FORECAST—born June 10, 1949. His seven nearest dams average 670 lbs. fat. Sire—Rockingham Peerlight, he traces 12 times to Langwater Holliston the sire of "Levity." Dam—Rockingham Press, she traces 15 times to Langwater Holliston, she has a record of 11161-561-Jr3C. Here is good type and production. Write for details and prices.
D. G. Tenney, Owner Salem, New Hampshire
ROCKINGHAM FARM

IDEAL FARMS
PUREBRED
GUERNSEYS

Why not be the proud owner of your own herd sire? We have many out of 700, 800, or 900 lb. dams. Breeding stock you are looking for. State your wants, better yet, come and see for yourself. The World's Greatest Production Herd. Prices reasonable.

IDEAL GUERNSEY FARMS
AUGUSTA NEW JERSEY

FOREMOST GUERNSEYS

FOREMOST IN NAME
and BREEDING FAME

Head your herd with a Foremost bull that is backed by generations of the breed's best bloodlines—a bull that is linebred for both type and high production. We always have for sale some very desirable young bulls. Write us or better still come to the farm before you buy your next herd sire.
FOREMOST GUERNSEY ASSOCIATION, INC.
Hopewell Jct. (Duchess County), New York
J. C. Penney, Pres. W. K. Hepburn, Mgr.

FOR SALE — Bull

Born Dec. 1949. A son of Coldspring's Romulus Anchor 11 AR daughters, proven for type and production. Dam made 14,175—702 8x4 and is ½ sister to 2 National Record cows. An attractive individual. Also a few heifers.
TARBELL GUERNSEY FARMS
Smithville Flats New York

1904 FRITZLYN FARMS 1950

FRITZLYN FLASHMAN, dropped 9/5/49
Sired by Fritzlyn Flash. Grandson of Caumsett Flashlight who just had a daughter finish with 731 lbs. of fat in Jr. 2. Dam: Fritzlyn King's Roseate. This son is a double grandson of Antietam Gypsy King who sired Fritzlyn King's Jeanette that will finish with 19,200 lbs. of milk and 860 lbs. of fat sold for $6000.
FRITZLYN FARMS Pipersville, Penn.

Van Wert County Guernsey Sale

OCTOBER 20, 1950 — 1 P. M.
Fair Ground, Van Wert, Ohio. 40 head cows, heifers, 3 bulls. Catalog: write
OTTO GEHRES Wren, Ohio

FOR SALE

Grandsons of Langwater King of the Meads and Langwater County Squire and out of Bournedale Rex and Langwater Africander bred dams.
TOM COOPER FARM Ardmore, Okla.

PRODUCTION & TYPE
GUERNSEY BULL CALVES

Serviceable age, Langwater breeding, out of high record dams, up to 795# butterfat. Sired by Langwater Michael whose 7 nearest dams average 710# B.F., 18 A.R. daughters. Langwater Liberator whose 7 nearest dams ave. 715# B.F., and Spruce Shadows Governor, our Jr. Herd Sire.
Write for Price and Description
SPRUCE SHADOWS FARM
East Old Shakopee Rd., Minneapolis 20, Minn.

Registered Guernsey Bull for Sale

Windyhill's May Rose Arbor No. 455442. Born Aug. 15, 1949. Sire, Windyhill's Valiant Hero No. 370332. Dam, Echo's May Rose Bonnie No. 553220. Dam's A. R. record: milk 11,976 lbs., % fat 5.15; B.F. 617 lbs., 365 da., 9 yr.
WINDYHILL FARMS Wayzata, Minnesota

BRANDTJEN FARMS

breeding for: LONGEVITY, TYPE and PRODUCTION. 18 years of herd building, 14 years of A.R. herd testing, 44 cows in the herd with 86 records, average 440# BF, with 5.16% av. test. With bull calves arriving 3 to 1, this is an opportunity for you to make our bull luck your bull opportunity. Several calves from 600# record dams on 2x.
BRANDTJEN FARMS, Farmington, Minnesota

GOOD GUERNSEYS FOR SALE

Barron County is a choice field to find those production bred cows and heifers in the Guernsey breed. Thirteen full time testing associations operating within the county. Buyers assisted by Guides and Sales Service. Let us fill your order.
BARRON COUNTY
GUERNSEY BREEDERS ASSOCIATION
BOX 474, BARRON, WISCONSIN

Quality Registered GUERNSEY FEMALES AND BULLS. Choice grade, fresh and springing cows and heifers all ages. Come direct to breeders to buy. Several hundred herds to select from. Fieldmen will assist you. T. B. and Bang's tested. WAUKESHA COUNTY GUERNSEY BREEDERS' ASSN., Frank Fox, Jr., Sec'y, Waukesha, Wis.

BETTER GUERNSEYS

Purebred and grades with outstanding production and type. Purebred bulls that will increase the value of your herds. T.B. and Bang's tested. Service to buyers is free. JEFFERSON CO. GUERNSEY BREEDERS' ASSN., Fort Atkinson, Wis.

HERD SIRE PROSPECTS

We are now offering some very fine bull calves. Some ready for service. Their sires are well known and their dams have recorded production. All females in our herd bred and raised on the farm. One of these youngsters will make money for you. Herd accredited.
HOARD'S DAIRYMAN FARM
Fort Atkinson, Wis.

Young Bulls For Sale

Backed by type breeding and records. We are offering for sale some of our herd sires. Green Meads Proud Gallant, Sierra Manor Magnet, R. Lane's Proud King. Sires' dams have records from 614 to 926 fat. Also some choice heifers. Write today for full information.
R - LANE FARMS, BASSETT, WISCONSIN
J. H. Rustman, Owner Lewis M. Meyer, Manager

BUYERS SERVICE: Grade and Pure Bred Guernseys and Holsteins. Springing cows and heifers, also open heifers. Have a good selection of young bulls. We are not dealers. SOUTHWESTERN WISCONSIN GUERNSEY BREEDERS ASS'N, Will C. Weittenhiller, Secretary, Platteville, Wisconsin.

Selected
Guernsey Bull Calves

By outstanding sires and out of high production dams from proven cow families at prices you can afford to pay. Free leaflets available.
BURTON LANE FARM
Box 552, Lake Forest Illinois

Don't Stop
Buying U. S. Bonds

COMPLETE DISPERSAL
Guernseys . . Yorkshires . . Farm Machinery
at the
HAUSER FARM, Harvard, Ill.
OCTOBER . . . 13th and 14th

81 PUREBRED GUERNSEYS . . .
- 4 Top bulls, Curtiss Candy Breeding
- 33 Cows—13 bred heifers—17 open heifers
- 14 Grades, many cows with HIR records over 500 lbs. fat—rich in Maxim blood

54 PUREBRED YORKSHIRES . . .
- 8 Brood Sows—9 Bred Gilts
- 30 Open Spring Gilts
- 6 Spring boars headed by Curtiss Candy S. Conqueror #1405 — (S. Solihull Dainty Boy 8th AR-D. Curtiss Candy T. Verna #345) *and*

ALL MODERN FARM MACHINERY AND SHOP TOOLS
ONE TEAM PUREBRED BELGIANS AND A GAITED RIDING HORSE

FOR RENT: Modern 200-acre Dairy Farm producing GOLDEN GUERNSEY milk

SALE SCHEDULE: Farm Machinery — October 13th - 12:00 noon
Yorkshires — October 13th - 7:00 p. m.
Guernseys — October 14th - 11:00 a. m.

Auctioneer: Robert Seitz, Waukesha, Wisconsin
Wm. G. Hauser, Owner — Loyal Neff, Manager
For reservations, information, catalogues, write to the
ILLINOIS GUERNSEY BREEDERS' ASSOCIATION, Batavia, Ill.

Wisconsin Guernsey Sale - Waukesha - Oct. 9

Top Animals selected from Top Herds—60 Cows & Heifers, 5 Outstanding Bulls, 10 4-H or F.F.A. Calves

This Show Window Sale has been held each fall for 23 years. All animals with records, carefully selected for type.

BULLS:
LANGWATER ROCKET, by Coldspring's Noble's Brilliant—3 nearest dams ave. 822.1—his dam Langwater Luna II has 609 Sr. 2. Full sister to Langwater Laddie, topped Wisconsin State Sale 1948, sold for $3700.00.
CHEDCO LEADER, by Flying Horse Lute's Colonel—13 A.R. daughters. Paternal brother sold in 1948 Wisconsin State Sale $2550.00. Chedco Laurel—823 fat—Classified V.G.
MEADOW LODGE BULL, by Meadow Lodge Rex's Kingmaker—17 A.R. daughters. His dam Langwater Halma 690 fat Jr. 2—Classified V.G.
BURTON LANE'S SUPREME PETER, by Valor's Faithful Supreme—16 A.R. daughters. His dam Burton Lane Sargon Heather—744.5 fat 365 days.
LOOKOUT VALLEY M. FALCON, by Sterlingold Marauder—3 nearest dams ave. 924.9—all class leaders. His dam Lookout Valley Levity Faith by Curtiss Candy Levity Hero has 211 fat 129 days Jr. 2. His Maternal Grandam—Highland Place Cherub Faithful—Wisconsin State Champion—15,789-M 820-8 365 C.
4-H SALE—10 calves carefully selected for foundation animals—bidding restricted to 4-H and F.F.A.
For Information and Catalog write: Wisconsin Guernsey Breeders' Ass'n., Box 14, Waukesha, Wisconsin, George D. Britts, Secretary.

Complete Dispersal of Gylden Farm Guernseys

JOHN E. JOHNSON, Owner, at BRANDON, WISCONSIN
WEDNESDAY, SEPTEMBER 27, 1950 . . . Commencing at 11 A M.
61 HEAD: 5 BULLS 28 COWS 7 BRED HEIFERS 21 OPEN HEIFERS
T. B. and Bang's tested, most of the females under four years old are vaccinated

Included in the sale are 18 daughters and 3 sons of Langwater Performer, a son of Langwater Pericles out of Langwater Soubrette 11413-481-FF.

There are 8 daughters and 1 son of Langwater Lively Laddie. He was by Langwater Onward out of Langwater Lively Lass 11813-672.9-G.

Also selling is Foremost Bridget's Champion who is by Foremost Diamond Jim out of Janet's Hardwick's Bridget 13681-687-5. Many of the cows are bred to him.

For information or catalogs write
PHILLIPS SALES AND PEDIGREE SERVICE, Box 494, WAUKESHA, WIS.

ATTEND GUERNSEY JUDGING AT THE NATIONAL GUERNSEY SHOW, WATERLOO, IOWA, OCTOBER 3rd AND 4th, THE HAWKEYE FARM DISPERSAL, IOWA CITY, IOWA, OCTOBER 2nd, BOULDER BRIDGE DISPERSAL, EXCELSIOR, MINN., OCTOBER 6th, THE WEY ACRES SALE, THIENSVILLE, WIS., OCTOBER 7th, AND THE WISCONSIN STATE SALE, WAUKESHA, WIS., OCTOBER 9th.

(All three Herds T. B. Accredited, Bang's Free and vaccinated with Strain 19).

HAWKEYE FARM DISPERSAL

DR. GEORGE H. SCANLON, Prop. **IOWA CITY, IOWA, MON., OCT. 2, 10:30 A. M.**

Five miles north of Iowa City, on Route 218. Rock Island Railroad serves Iowa City, United Airlines and Greyhound Bus service, also Electric Line between Cedar Rapids and Iowa City.

82 HEAD — 8 BULLS, 4 OF SERVICE AGE — 40 COWS — 10 BRED HEIFERS — 20 OPEN HEIFERS

For Catalogues and Information Write: THE LOUIS McL. MERRYMAN & SONS, Inc., Sparks, Maryland

BOULDER BRIDGE FARM COMPLETE DISPERSAL, EXCELSIOR, MINNESOTA

157 HEAD, 10 BULLS, 77 COWS, 19 BRED HEIFERS, 49 OPEN HEIFERS . . . . . ENTIRE HERD CALFHOOD VACCINATED

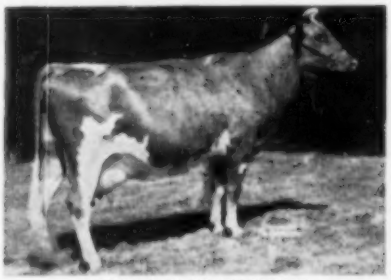
10:00 A. M. . . . FRIDAY, OCTOBER 6TH

Boulder Bridge is 21 miles west of Minneapolis Loop on Highway 7 — ***Sales Headquarters: Radisson Hotel, Minneapolis***

For over a quarter of a century the name, Boulder Bridge, has been synonymous for top Guernseys. Four National Champion bulls have stood at the head of this great herd, representatives of which have been on exhibition nationally without missing a year since 1928. During this period 218 Championships and 598 First Prizes have been awarded at State and National Exhibitions. The herd has been continuously in DHIA and has a lifetime average of 433 pounds of butterfat.

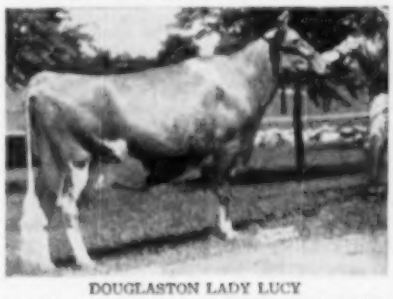
This sale offers Guernsey breeders the chance of a lifetime to buy herd sires and cow families.

THREE EXCELLENT COWS SELLING



BOULDER BRIDGE QUEBEC

14492-681-Sr. 2. 15731-765-5 yrs. 365. Classified Excellent 1950. 1st 3 yr. old, Ill., Wis. and Waterloo '46; 1st Aged Cow, Sr. & Gr. Ch. Minnesota and Wis. '49. 1st Aged Cow International Dairy Exposition 1949. "Quebec" is due September 15th to Boulder Bridge Lucero (Valleywood Valiant Hero-Douglaston Lady Lucy). In addition to this calf there are four daughters of "Quebec" including **Boulder Bridge Winona** 12786-611-Jr. 2. 305. 1st 2 yr. old, Ill., Minn. and 2nd Wis. 1949, she by Valleywood Valiant Hero. "Quebec" is a daughter of Boulder Bridge Matchmaker out of Queen's Dolly of Smithdale, two records over 650, she out of Hope's Queen of Smithdale. She is a grand-daughter of the great Faith of Chesney Farms, one of the great brood matrons of the breed from which there are many descendants in the sale.



DOUGLASTON LADY LUCY

10649-539-GG. 14762-780-AA. Classified Excellent 1947, 1948. Sire: Imp. Financier of Myrtle Place. Dam: Douglaston Mary Tech. 12019-567G. 13239-650-BB. "Lady Lucy" is one of the great reproducing cows of the breed. In the sale will be two daughters including **Boulder Bridge Panchito** 546-GG; 673-Jr.4; 693.7 yrs., Ch. Ky. '47, Ex. '47; VG. '48, '50. Also there will be three sons of Lady Lucy including **Boulder Bridge Lucero** he by Valleywood Valiant Hero, thus full brother to Panchito. The daughters of "Lucero" mark him as one of the outstanding sires of the breed. There will be over 65 descendants of "Lady Lucy" in the sale. She is one of three Excellent daughters of that great sire of brood cows, Imp. Financier of Myrtle Place, whose blood is enhancing in value.

BOULDER BRIDGE URANIA

11723-650-Sr. 2. Classified Excellent 1950. S: Boulder Bridge Conquest. Sire of 1st Jr. Get NGS. '49, he by Green Meads King Don out of Douglaston Lady Lucy. D: Boulder Bridge Senna. 8900-538-Jr. 2-365. She by "Matchmaker" out of Boulder Bridge Oleander 576-F, she by Caumsett Harvester out of Boulder Bridge Linneta 572-F, she by Wyebrook Matchless. "Urania" is one of the great young cows of the breed and she goes back on the bottom line to Florham Abba 10605-540-G, one of the foundation cows at Boulder Bridge. She is the climax of 25 years breeding. Also in the sale will be her daughter by Boulder Bridge Lucero, thus a double Lady Lucy.

For catalogs and other information write: LOUIS McL. MERRYMANand SONS, Inc., Sparks, Md., or H. M. TATE CO., Trenton, N. J.

WEY ACRES SALE — THIENSVILLE, WISCONSIN — SATURDAY, OCTOBER 7th — 1:00 P. M.

THE WEEK OF WATERLOO THE DAY AFTER THE BOULDER BRIDGE DISPERSAL

At the farm which is north of Milwaukee on Range Line Road. From downtown Milwaukee take 3rd Street north to Green Bay Avenue to Range Line Road then north to the Farm. Coming from the south on 51 turn east at Meqrien to Range Line Road. From the South and West take Rt. 100 around Milwaukee to Brown Deer Road, turn north on Range Line Road. Frequent Air service on North-West Line from Minneapolis and night train on Milwaukee and North Western Railroads.

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7 BULLS, 21 COWS, 5 BRED HEIFERS, 35 OPEN HEIFERS — 2 sons, 24 daughters and 15 granddaughters of Coronation Levity Prince A. R. $11,000

ALFALFA FARM PRIMROSE (EX)

12658-765-E; 17564-1083-BB. Dam of Flying Horse Colonel Levity $10,000. He is represented in the sale by 3 sons as follows:

IN SALE

WEY ACRES COLONEL'S MAJESTIC

Dropped: September 4, 1949

HIS DAM

RIEGELDALE EMORY'S MELBA (VG)

13735-746-Sr. 3. S: Riegeldale Melba's Emory $30,000. D: Riegeldale Melba's Dairymaid (VG) 12104-716-BB. $16,000.

WEY ACRES COLONEL'S GAYLORD

Dropped August 12, 1949. D: Gayoso Levity 7627-447-Jr. 2 in 289 days, still on test. Sire: Gayoso Coronation Levity, topped Gayoso Sale at $3,100. Dam: Coronation Levity (VG) $15,000. 10115-577-GG; 15252-867-A. 3 AR daughters, 3 AR sons.

WEY ACRES COLONEL'S HILARION—dropped February 7, 1950. Dam: Wey Acres Challenger's Hester. 12652-570-Jr.2-365; 14993-674-Sr.5-365; 17927-799-A; 6020-255-A in 109 days on test.

WEY ACRES COLONEL'S AZTEL—dropped April 15, 1950. Dam: Wey Acres Levity Anita. 14552-614-Jr.2; 2540-90 fat-Sr.7 in 44 days.

WEY ACRES COLONEL'S DELBERT—dropped May 14, 1950. Dam: Wey Acres Bruce's Design. S: St. James Champion Bruce. D: Coronation Design. 13240-614-Jr.4.

TWO SONS OF CORONATION LEVITY PRINCE

WEY ACRES LEVITY'S LIL'S ABNER—dropped May 5, 1950. Dam: Wey Acres Templar's Lil. 16405-791-Jr.5-305 days; 1st Pl. 16436-751-Jr.4-305 days; 5th Pl. 5626-285-in 84 days on retest. 2nd Dam: Wey Acres Lillian's Lustre (EX). 13555-638-G; 17998-914-Jr.5-401 Pl.

WEY ACRES LEVITY DYNAMO—dropped August 5, 1950. Dam: Curtiss Candy Noble Deborah. $10,500. 14455-696-Jr.2. S: Curtiss Candy Levity Glow AR. D: Quail Roost Noble Primrose. $17,000 (EX). 15695-704-GG; 15730-744-Jr.9C. Champion Waterloo '47 and '48.

ONE SON OF ST. JAMES CHAMPION BRUCE. S: St. James Champion x Champion. D: St. James Prince's Barbara. 14712-795-A; 12716-714-D; 12956-704-AA; 15419-705-AA. A maternal brother to St. James Philosopher's Barbee. 16605-915-A; 16922-904-9 yrs.; 19889-1055-11 yrs. (EX), Champion Waterloo '41-'42.

WEY ACRES BRUCE'S CZAR—dropped March 14, 1950. Dam: Valroyal Kate. 13551-642-Jr.5; 17156-765-A.

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With Calf-Kit you save *most* of the 250-500 pounds of milk you're now feeding. Cut costs 1/3 or more! And at the same time you can raise rugged calves with real "milk-fed" bloom and vigor.

You get the finest "milk-fed" results from Calf-Kit because it's *made* from milk — 98% milk serum solids, plus guaranteed available amounts of Vitamins A, D and Riboflavin to promote better growth, health and stamina. See your Calf-Kit dealer — start your fall calves on Calf-Kit.

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Foot and Mouth Disease in Venezuela

The U. S. Department of Agriculture has reported that several outbreaks of foot and mouth disease have occurred in one of the important dairy centers of Venezuela. First appearances of the disease apparently occurred in the Caracas Valley and especially around Lake Valencia.

While mortality has been relatively low, milk production is said to have been reduced 50 per cent in some herds. The Venezuelan government has appropriated some 1.5 million dollars for carrying on an eradication campaign. The authorization also provides for the establishment of an executive committee to be charged with the planning, direction, and control of the campaign against foot and mouth disease. No evaluation of losses has been made by the Venezuelan government since no estimates are available of the number of cattle or other livestock affected or exposed.

Venezuelan cattle numbers are estimated at around three million head, hogs near three-fourths million head, and sheep at less than 100,000 head. There are also unknown numbers of goats and wild ruminants that are likewise susceptible to the disease.

The outbreak in Venezuela caused considerable concern to the Colombian government, which is one of the few remaining countries in South America free of foot and mouth disease. As a precautionary measure, the Colombian government is reported to be temporarily closing its border on the Venezuela side to movements of livestock, vehicles, and persons from either country.

Keep Calves Off Pasture In the South

A study of parasite infestation of calves on pastures has led C. D. Grinnells and J. L. Moore of North Carolina State College to three main conclusions:

1. Calves under 10 months of age should not be turned on pasture.
2. Calves should be rotated to reduce the parasite intake.
3. Calf pasture should be grazed part of the time by horses, mules, or by mature cattle.

Parasite populations build up very rapidly on calf pastures, the investigators found. The increase was most rapid on heavily grazed plots, these showing almost double the parasite population as the lightly grazed plot. Calves under 10 months are extremely susceptible to parasite attack. Rotating pastures and grazing them with mature animals cuts down the population. Mature cattle have an age immunity.

Dr. Leland Spencer of Cornell University who recently spent three months studying dairy conditions in eleven European countries says: "In none of the countries of Western Europe does the quality of city milk supplies equal or closely approach that of the more advanced sections of this country."

"HIDDEN HUNGER"— *Lack of essential mineral elements needed by livestock for sturdy health, rapid growth, peak production and reproduction.*

Now is the time to help safeguard your profits and the future health and continued productivity of your stock. Protect them against "Hidden Hunger"—feed Near's MinRaltone year round. MinRaltone is the thoroughly proven mineral feed supplement that contains 11 essential mineral elements plus Vitamin D. Write us for free MinRaltone Feeding booklet and complete details.

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Veterinary Column

J. W. BAILEY, D.V.M.

Ruptured Pigs

Every once in a while we get inquiries about the fairly common rupture in pigs. The trouble is shown in the form of a soft swelling where intestines bulge under the skin after escaping from their proper location. They generally get through at an opening between two belly muscles which is known as the internal inguinal ring but the swellings may appear in different places.

In boars they are usually in the scrotum and this is logical because of the way they develop. The testicles normally start at a point close to the kidneys and then gradually "come down" as the pigs develop. Eventually they leave the inside of the body through the internal inguinal rings, one on each side of the belly half-way between the navel and anus, and finally come to rest in the scrotum. Under normal conditions the internal rings allow passage of nothing more than the testicles. When Mother Nature makes the ring too big, a loop of intestines is mighty apt to follow a testicle into the scrotum. In case both rings are too big and intestines follow both testicles, the boar is commonly said to have a "double" rupture.

Sows don't have testicles, of course. However, they do have internal inguinal rings which may be big enough to permit ruptures. Not being equipped with scrotums, the females have to carry the intestines in swellings on their bellies. Enlargements may appear in the same location on boars when the intestines are unable to get all the way down into the scrotum.

In both sexes a rupture is often seen at the navel when the opening there fails to contract after the cord is broken at birth. The intestines are thus permitted to escape under the skin instead of remaining inside the body where they belong.

Surgery represents the only practical treatment and is best done when the pigs are well started and weigh 15 or 20 pounds. Correction consists of opening the belly, returning the intestines, and closing the troublesome opening with catgut. Boars are commonly castrated at the same time, with testicles being removed through the belly incisions. Sanitation and know-how are pretty important, so ruptured pigs are best taken care of by a veterinarian. He will appreciate having the animals starved for 24 hours before the operation, too, since empty intestines are easier to return and keep in place than full ones are. This detail will help speedy recovery.

Available evidence indicates that rupture is almost entirely an inherited characteristic in swine. Prevention, then, is as simple as choosing the right kind of breeding stock. Sows or boars producing ruptured offspring are best disposed of on the market. Pigs that are operated on for rupture should be earmarked at the time so they won't be used for breeding purposes later on. The "saving out" of pigs from litters where ruptured youngsters have appeared is dangerous, since even the healthy-looking ones will probably carry the undesirable characteristic.

"Hardware trouble" in cows often shows up a short time after calving.

Preventing Calf Scours

Discovery of a strong link between milk-gulping and calf scours may give dairymen the best and simplest means yet found for preventing this troublesome disorder, the American Veterinary Medical Association has announced.

A report issued by the AVMA, based on observations of Australian veterinarians, explains why nursing calves seldom develop white scours, while those which are pail-fed often get it.

Key to the problem is believed to lie in the fact that calves fed from pails can gulp down a full feeding of milk in a minute or two. As a result, not enough saliva is mixed with the milk to prevent easy digestion. The milk forms into a hard, tough curd that is not digested before the next feeding, and white scours soon follows.

In contrast, calves that are nursing on cows get their milk at a slower rate, so that it becomes mixed with 10 to 15 per cent of saliva. This, in turn, produces a light, frothy, easily digested curd that will not cause an intestinal upset.

Lending extra weight to this explanation was the fact that calves nursing on hard milkers rarely got scours, while those on cows that milked freely and leaked milk were highly susceptible.

Two Means of Prevention

Prevention is possible by either of two procedures, it was reported. Either dilute the milk 10 to 15 per cent with water before putting it in the feeding pail, or feed it undiluted through a special rubber teat that slows down the flow. Of the two methods, the rubber teat is preferred because it has an added advantage of eliminating the desire to suck other calves.

COW LEAKS MILK

We have a cow that is a leaker; she is a good milker but when milked in the morning about 6 o'clock she will give as much milk at noon that day as she will if left out until six that night, as she leaks it out. When walking she squirts milk out of two quarters at every step.

We have tried dipping her teats in a solution after milking but this procedure which is supposed to stop her leaking, has no effect. Could this condition be corrected by surgery during her dry period?

Belmont, N. C. Bro. Stephen

There is a surgical operation which is fairly successful for correcting leaky teats on cows. It consists of removing a piece of the sphincter muscle in the end of the teat and suturing the cut so that the orifice is smaller after healing.

As you suggest, the operation will have to be done while the animal is dry.

Milk and butterfat production of cows with 10 or 11 months calving intervals is significantly lower than those having 12 to 13 month intervals. Indications are that the unfavorable influence of short calving intervals may extend into the next lactation period. Longer calving intervals did not give significantly greater production.—W. J. TYLER and GEORGE HYATT, JR., West Virginia.

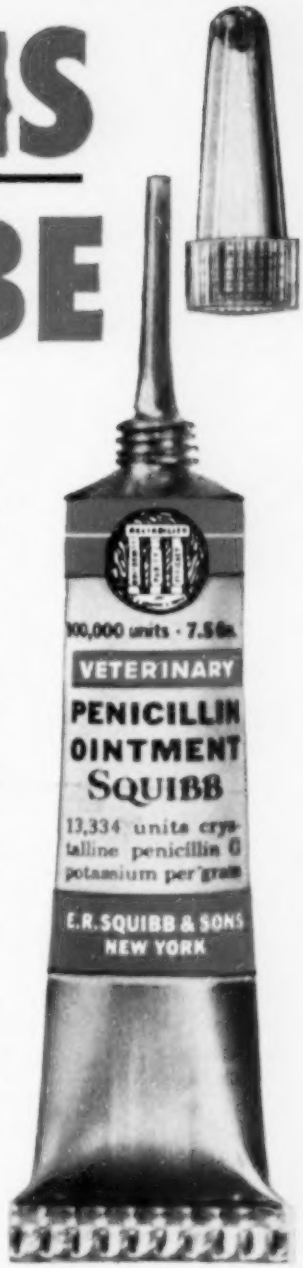
BE SURE!

when you treat

MASTITIS*

ask your druggist

for THIS TUBE



- Go to your druggist and ask for this "instant-use" tube by *name*—"Squibb Penicillin Ointment"—if there's mastitis* in your herd!
- *This* is the penicillin ointment that has *successfully treated millions of cases of mastitis.*
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- This ointment is stable, non-toxic, non-irritating. It's a clear ointment and won't discolor milk.
- *Remember* to ask your druggist for Squibb Penicillin Ointment. Write for mastitis folder. E. R. Squibb & Sons, Veterinary and Animal Feeding Products Division, Dept. HD-9A, 745 Fifth Avenue, New York, N. Y.

For accurate diagnosis, consult your veterinarian.

*Due to *Streptococcus agalactiae*, the cause of the largest percentage of all mastitis cases.

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Drawbar power pulls 2-bottom plows, harrows, drills, planters, haying and harvesting machines. *Take-off power* operates mowers, combines and corn picker-huskers. *Belt power* drives every kind of labor-saving farm machine. *Uni-Matic hydraulic controls* regulate Quick-On—Quick-Off and Attachor Tools as well as your pull-behind machines.

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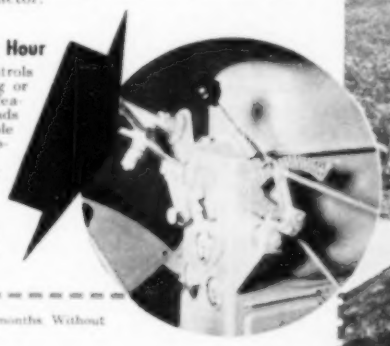
See your neighborly, neighborhood MM Dealer or send for complete facts on all-purpose Model R Tractors today!



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